

TELEPHONE: CENTRAL 3617 TELEGRAMS: "CHEMICUS, CANNON, LONDON" (2 Words)

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No. 2265.

JUNE 23, 1923.

Vol. XCVIII.

INSULIN



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Minimum Retail Price 1/9 per bottle.

Per dozen 14/6

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The following are a few selections from our Illustrated Catalogue. Many styles of label and carton are available.

Universal Grape Saline
Effervescing Saline
Effervescent Universal Saline
Granular Effervescent Citrate of Magnesia
Effervescent Health Salt
Invigorating Health Salt
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Effervescent Sulphur Saline
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X

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ABSOLUTELY PURE and ABSOLUTELY SNOW WHITE.

"FARRIS'S" GENUINE YELLOW BEESWAX

is carefully refined and entirely free from dross of any kind. In slabs about 10 lb. each, also 1-lb., 4-oz., 2-oz., & 1-oz. rounds. Celebrated for excellence and purity for upwards of three-quarters of a century.

FARRIS'S SPECIALLY REFINED PURE SPERMACETI,
Refined MONTAN WAX fashioned kind). STEARIC ACID, CERASINE
ALSO WAXES & OILS OF EVERY KNOWN KIND & FOR EVERY PURPOSE.

The only actual Manufacturing Wax Chandler in the City of London

Helmet Court, Wormwood Street, Bishopsgate, London, E.C. 2. (Entrance also between 77 & 79 BISHOPSGATE).



A Quick Selling Line!!

Lavender MOTH TABLETS.

Saves Clothes, especially Woollens and Furs, from destruction by Moths.

Sample tin free on application

Price:- 3 dozen @ 5/- per doz. 12 doz. @ 4/9 per doz.

H. & T. KIRBY & Co., Ltd.,
Newman House, WILLESDEN GREEN, LONDON, N.W.2.

Maws



Page

Give Prominence to "Parex"

There are many good reasons why the pharmacist should give prominence to the "Parex" Toilet series. He knows that the series is attractively presented and makes a display which will undoubtedly secure the interest of any potential customers. He knows that the goods are of high quality, and will please his customers and enhance his reputation for reliable toilet accessories.

What is more, he knows that "Parex" is a name which is confined to his own profession, and when he sells "Parex" toilet items he is strengthening the principle of pharmacy for the pharmacist.

A leading line of the "Parex" series is "Parex" Dental Cream. As a staple line, with a steady and certain demand, dental cream commands the special interest of every pharmacist, and "Parex" Dental Cream

has many advantages over the ordinary tooth cream at the same price.

The tube is considerably larger than the average. The decoration on the carton and the tube gives it an air of quality and distinction, which is also striking for display purposes, and it carries a good profit as follows:—

"Parex" Dental Cream, each in carton - 1/3

S. Maw, Son & Sons Ltd.
Aldersgate St., London.

and Barnet.

Telephoner City 7 Private Branch Exchange Telegrams
Eleven
Cent
London



Cables: Eleven London

Code A.B.C. 44&54 Edition

Companion Lines



Made of purest India Rubber.

No taste or smell.

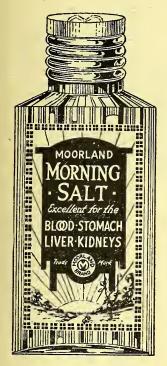
Practically indestructible. The most perfectly made all-rubber soother ever offered for sale.

'SIMPLIC' TEATS

Made of purest India Rubber. In 8 different patterns. Each in separate carton. IN BOXES OF 3 DOZEN.

Ask your Wholesaler for "Simplic" REGD.

GOING STRONG



RETAIL 1/9



RETAIL 10d.

BOTH our "salt" lines — Moorland Health Salts and Moorland Morning Salt—are going strong in sales, consequently in profits. Each year sees a further increase in their popularity—really no cause for wonder, since in every way they give complete satisfaction and value for money.

MOORLAND HEALTH SALTS. Packed in bright, specially prepared tins, treated with a waterproof inodorous cement. The Salts give a sustained effervescence in water and are cool and very pleasing to drink.

5|6 per dozen.
5|- per dozen gross lots.
4|6 per dozen 2 gross lots.
4|3 per dozen 5 gross lots.
Splendid show matter free with each order.

MOORLAND MORNING SALT. Attractively labelled and packed, with flanged cork and aluminium cap, it is a really healthgiving drink, refreshing and invigorating.

11/6 per dozen. 11/- per dozen gross lots. Retail 1/9.

Show matter free with each order. A complete window display free with a gross order.





in 10-oz., 20-oz. and 36-oz. tins at 2/-, 4/- and 7/-

In every advertisement for Trufood, whether in the public press or in the medical and nursing journals, this slogan occurs. It indicates the basis of our trading policy, which is to direct every sale through the chemist.

There is no other channel of supply open to the public.

You are certain to be asked for Trufood, and should order at least a minimum supply to meet enquiries. A steady public press campaign, backed by circularisation and calls upon the Medical Practitioners and Nurses, is creating an ever-increasing demand.

We count upon you to support our efforts to foster goodwill between yourselves and the buying public.

TRUFOOD LIMITED

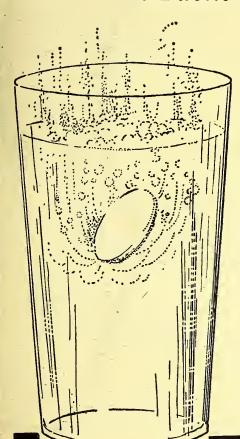
The Creameries, Wrenbury, Cheshire London Offices: LEVER HOUSE, BLACKFRIARS, E.C.4

TRUFOOD

AYRTON'S LEMONADE TABLETS

There's nothing to equal these thirst stayers, and if you are not already stocking—one of the year's opportunities is passing your way.

The Public have decided:—



That they are the most palatable.

That they are preferable to crystals or powders.

That they make the most easily prepared summer drink.

That they are cheap and economical

For

PICNICS, OUTINGS, PARTIES, BOATING, TENNIS, CRICKET and all Summer occasions.

Just a tablet dropped into a glass of plain water makes a delightfully refreshing effervescent drink—already sweetened.

UNIQUE DISPLAY MATTER AVAILABLE AND LIBERAL COUNTER BILLS WITH EVERY ORDER.

P.A.T.A. 61/2d. per tin of 6 tablets

54/- gross

With I dozen bonus added to each order for one gross.

Note our Telegraph Address. You'll probably need it:— "SUNDRIES," LIVERPOOL, AYRTON, SAUNDERS & CO., LTD. HANOVER STREET LIVERPOOL.

DODGE & OLCOTT CO.,

20 MARK LANE, LONDON,



THE "D & 0" BRAND

is the "Standard of Quality" for

OILS of BAY, CEDARWOOD, PATCHOULI, PEPPERMINT. SASSAFRAS, ETC.

> BALSAMS of Copaiba, Peru, Tolu. TONKA BEANS, Angosturas.

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Aromatic Chemicals Flower Oils Synthetic Perfumes Essential Oils

CHEMICAL WORKS, ROERMOND

H. RAAB & CO., ROERMOND, HOLLAND.

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JAKSON'S PEPPERMINT, LAVENDER & CAMOMILE OILS

are the BEST.

Produced and Prepared by

THE LARGEST GROWERS & DISTILLERS IN ENGLAND.

Distillery:

J. JAKSON & CO. (Mitcham Rd., 1921), LTD. Mitcham Road, WEST CROYDON.

AGENTS for the U.K. :

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SPECIAL OFFER



Brownie Gillette Razor Genuine Gillette Blades Rollfix Stropping Machine Auto Strop, Ever Ready, etc.

ALL LINES TO SUIT CHEMISTS

Write for Reduced Bargain List. TERMS: NET CASH WITH ORDER OR APPROVED REFERENCES.

L. FRANKENBERG 15 STONEY LANE

Phone: Bank 448.

The hall hall hall

The States States Man





The present demand for perfumery of the heavy, oriental type is met very completely by 'Distol' Ottos.

"Distol" Oriental, Nubian Poppy, Bouquet, Passion Flower, Tréfle, Orchid and Royal Orchid are all variations of this theme.

An ounce of any of them costs 7/6 and makes 80 ozs. of choice perfumery by the mere addition of S.V.R. and Aq. Dest. Write now for samples of six oriental perfumes made under commercial conditions from "Distol" Ottos.

Ask for a sample of the new "Luxor" own-name retailing label.

THOMAS KERFOOT & COLUNG BARDSLEY VALE, LANCASHIRE, & Bardsley House, London, N.1 ESTABLISHED 1797.

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DEARBORN (1923) LTD

Grav's Inn Road. LONDON, W.C.1.

Toilet Specialties.

•		Price	Selling				
		per doz,	Price				
	•••	o Retailer	1/-				
		10/-	1/-				
		10/-	1/-				
ALLACITE OF ORANG	E						
BLOSSOM	•••	22/6	2/6				
		22/6	2/6				
	۰.	22/6	2/6				
	•••	22/6	2/6				
	•••	22/6	2/6				
	••	22/6	2/6				
	••	22/6	2/6				
	•••	31/6	3/6				
		36/-	4/-				
A depilatory.	•••	36/-	4/-				
For the eyelashes. MERCOLIZED WAX	••	31/6	3/6				
A face cream.		36/-	4/-				
For oily complexions and bla	ckh	eads.	•				
SILMERINE	••	22/6	2/6				
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LIQUID PERGOL		31/6	3/6				
BICROLIUM perspirati	ion	locally. 22/6	2/6				
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COCONOIDS		31/6	3/6				
For figure development.			-				
The Products of Messrs. PARKER, BELMONT & CO.							
	Or [36/ -	4/=				
CLYNOL BERRIES For obesity.	l	58/6	6/6				
SOFT PALERIUM		45/-	5/-				

Stocked by ALL Wholesale Houses.

LIQUID NAIL POLISH ...

Brilliant and lasting.

COLONIAL DEPOTS AND AGENCIES.

COLONIAL DEPOTS AND AGENCIES.

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Ltd., Grace House, Clarence Street, Sydney.

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Cripinate Bath Salts

Containing Isobornylalyl-Pineol.

Recommended for

RHEUMATISM LUMBAGO SCIATICA **SPRAINS MUSCLE STIFFNESS**

> Tripinate Bath Salts do not merely colour and perfume the bath water, they have distinct medicinal properties, and greatly stimulate the activity of the heart and blood circulation.

> For full particulars and Terms

19 Railway Street

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4 out of 5

Not just a few, but four out of five of your customers past the age of forty and thousands younger suffer from Pyorrhea. Dental statistics prove it.

By national advertising, continued over a number of years without ceasing, we have shown your customers that Forhan's For the Gums prevents Pyorrhea. They have learnt from us also that Forhan's For the Gums is more than a tooth paste.

Our attractively coloured showcard displayed in your window will tell them that from you they can purchase Forhan's For the

Gums, and having bought Forhan's For the Gums from you once, they become your regular customers.

THOS. CHRISTY & CO. 4-12 Old Swan Lane, London, E.C.4.



Four Shillings & Twopence Profit

on Every Single Sale

Is there any other line in your shop or drug department that shows such a remarkable profit on each sale as

HUMAGSOLAN

Think of the dozens of packets you would have to prepare and pack up in the ordinary way to total 4/2 profit. From every point of view it pays to handle HUMAGSOLAN. Think of the profit and then you can guarantee to every customer that HUMAGSOLAN does grow hair.

MILLIONS OF PEOPLE EACH WEEK ARE TOLD ABOUT HUMAGSOLAN

Our vigorous Press campaign has met with a wonderful response. The public have realised that here is something more than a mere hair tonic or pomade. In HUMAGSOLAN they have an actual hair food, as proved and prescribed by the medical profession British Hospitals. We shall be pleased to furnish you with full particulars regarding HUMAGSOLAN, trade terms etc., immediately on hearing from you.

HUMAGSOLAN LIMITED

(Sales Promotion Dept.)

Faraday House, 10 Charing Cross Rd., London, W.C.2.

STAND 23 AT THE CHEMISTS' EXHIBITION

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These two cartons should be on every counter.

To obtain the full benefit of our extensive advertising campaign appearing in many of the leading papers throughout the country, we advise our customers to display this good selling line to advantage.

An attractive window display will be sent on request.

Dr.BUCHANAN'S

A positive cure for all skin diseases— Eczema, Barber's Itch, Bad Legs, Pimples, Ringworm, Chilblains, etc.

1/3 tins (P.A.T.A.) Skin Clear - 10/- doz.
9d. tabs (P.A.T.A.) Skin Clear Soap 6/- doz.
(In cartons)

Supplies can be obtained through your usual wholesale house or direct from us.

POTTER & CLARKE LTD.

DRUG MERCHANTS & MANUFACTURING CHEMISTS
60, 62, 64 ARTILLERY LANE LONDON : 1
AND AT 24 LUNA STREET, GREAT ANCOATS, MANCHESTER.



CO-RE-GA

(POWDERED

Comfort Powder

Holds False Teeth Firmly in the Mouth

PREVENTS SORE GUMS.

Dentists everywhere are now prescribing and sending patients to Chemists for CO-RE-GA. Sales are increasing tremendously on account of this extensive and intensive dental propaganda work. As a Dental Plate Fixative CO-RE-GA stands alone for dependability and long-lasting adhesive properties.

CO-RE-GA is a ready repeater and sells anywhere, whilst profits are not only good, but amply protected. Add to your personal prestige by handling CO-RE-GA.

LIKE THE DENTIST—RECOMMEND IT WITH CONFIDENCE.

IN METAL CANISTERS:

(Small) 1/6 P.A.T.A. — — Doz. 12/— (Medium) 2/6 ,, — — — — ,, 20/— (Large) 4/3 ,, — — — ,, 34/—

ORDER FROM YOUR WHOLESALER-or direct from

Thos. Christy & Co. (DISTRIBUTORS),
4/12 Old Swan Lane - - London, E.C.4.
SAMPLES MAILED FREE ON REQUEST.



GIVES A-GOOD PROFIT ENSURES LASTING BUSINESS



One of our Customers says:

"We are always pleased to handle Evan Williams' Specialities for, amongst other reasons—

"We never get any complaints.

"They are quick sellers.

"You leave the retailer a good margin of profit."

The EVAN WILLIAMS CO., LTD., 18 & 18a, Ogle St., Foley St., LONDON, W.1.

"SAMBOV"

is made from the purest materials which combined, provide the hair and scalp. It is called "a wonderful grower," and may be used by young and old without harm; is especially good in relieving irritation, and cleansing the scalp. It preserves the colour of the hair.

To be obtained from maker on sale or return terms, but is a ready seller. Everyone likes "Samboy."

"SAMBOY," 22 STRAND, RYDE, I.W.

Dentists and Doctors are recommending

The perfect antiseptic bath for artificial dentures. Contains a 12 months' supply of antiseptic in tablet form. Add water. That's all!

Carries a good margin. Retails

Dozen lots, 39/-, carr. forward. 2 dozen lots, 39/- doz., carr. paid. LONDON WHOLESALERS: Warrick Bros., 6 Nile St., City Rd., N.

MAKERS: Tiffin's Dentabath, Ltd., 37c, King St., S. Shields.



FICHNER'S GREASE PAINTS

POWDERS

Etc.

Obtainable from your Wholesalers or direct from

ANITIES LTD.

(Sole British Agents). 15a WHITCOMB STREET, LONDON, W.C.2

Why "Watts" Blades excel.



WATTS" Razor Blades have a warts Razor Blades haves super-keenness that ensures per-fect shaving. They are British, and most important of all, high-quality blades; made by a firm established over 150 years. The first grade steel used is the finest procurable.

12 Perfect Blades in Every Dozen.

Sole Manufacturers:

JOHN WATTS.

Dept.3, Lambert Works, SHEFFIELD.

London:

24 Redcross Street, E.C.1.

3/6

per doz. 50% PROFIT the dealer.

FOR GILLETTE-TYPE AND AUTOSTROP-TYPE HOLOERS.

BLADE



FIRST CHEMISTS' WINDOW DRESSING COMPETITION.

List of Prize Winners:—

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W. H. Harrison, 35, Wilbraham Road, Chorlton-cum-Hardy, Manchester.

2nd Prize - £50.

L. V. Angel, 241, Great Homer Street, Liverpool.

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F. Oldham, 10, Market Place, Wisbech.
W. A. Thomas, The Market St. Pharmacy, Crewkerne, Roper & Lewis, 34, Tavistock Road, Plymouth.

100 Prizes of £1 awarded to:—

J. McGavin & Son, 110, Friargate, Preston. Francis & Co., Chemists, Wrexham, W. Spyvee, 30, Southgate, Sleaford.

J. Whitfield, 113, Westborough, Scarborough. H. E. Clements, High Street, Hampton Hill, Bakers, Ltd., 9, Midland Street, Hull. Sidney Lane, 100 Western Road, Hove.

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Galloway, 43, Nantwich Road, Crewe.

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Boulton & Skelton, Ltd., 86, Victor Street, Grimsby. S. O'Farrell, Ltd., 33, North Strand, Dublin.

S. O'Farrell, Ltd., 33, North Strand, Dublin.
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R. Robertson, 47, Canterbury Road, Folkestone.
Sloane Pharmacy, 29, King's Square, S.W.
Amos Hunt, 1264, Pershore Road, Stirchley, Birmingham.
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J. Young & Sons, 16, Gallowtree Gate, Leicester.
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39, Market St., Manchester; 82, High Holborn W.C.;
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108. Commercial Rd., Bournemouth; 12/18, Market
St., Blackpool; 102, Princes St., Edinburgh; 130,
High St., Southend-on-Sea; Pelham St., Nottingham;
287/91, Lord St., Southport; 26, Bridge St., Brow,
Stockport; 128/62, Western Rd., Brighton; 282, High
Rd., Chiswick, W. 4.; 42/44, North End, Croydon;
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J. Russell, 131, Darlington Street East, Wigan, T. L. Salter, 4, High Street, Southall.

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Carr & Co., Ltd., Chemist, Newmarket, Cambs.
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J. Cross & Co., 83, Oxford Street, Reading.
H. A. Martin, Chemist, Willow Bridge Street, Leicester.
T. H. de Blois-Leach, 8, Sheep Street, Northampton.
H. Lancaster, Drug Strs., Victoria Rd., Farnborough, Hants
Milburns Ltd., 95/7, Northumberland Street, Newcastleon-Tyne.

on-Tyne. W. H. Dixon & Son, 51/3, High Street Eest Grinstead. Murrays Pharmacies, 9, Upper Accommodation Rd., Leeds. & F. PEARS, Ltd., 71-75, New Oxford Street, LONDON, W. C. 1.





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2/9 doz. or 30/- gross.



CARR. PAID in lets of 6 doz. anywhere in the British Isles,

British Isles, with display cards.

In Dainty Aluminium Boxes with screw lids, contents approx. $\frac{1}{2}$ oz. Most convenient for Ladies' handbags.

THIS LINE HAS CAUGHT ON WELL IN LONDON; AND WE GUARANTEE IT TO BE THE RIGHT GOODS. A REALLY ATTRACTIVE PROPOSITION.

Other Lines we manufacture:
FACE POWDERS
COMPACT ROUGE
HAIR LOTION, &c.
Let us quote you. Terms 2½% Month
3½% 7 Days

THE PARKSIDE MFG. CO.

58 Paris Gardens,

Blackfriars, London, S.E.1

A wonderful new series of toilet preparations

is now being introduced to the British public under the title of Melba. The series comprises Face Creams and Powders, Rouges, Lip-Sticks, Complexion and Manicure Specialities, etc., and the prices are graded to meet almost every class of custom.

A hearty invitation is extended to Chemists visiting the Exhibition to call at Stand No. 137.

STELBA TOILET PREPARATIONS

are confined to chemists and stores, and the manufacturers are embarking on huge publicity campaigns to create demand. Powerful window-show material supplied with orders.

Sole Consignee: Write for Price List.

A. CONNELL & CO., 20 Bevis Marks, London, E.C.3

Members of the profession unable to procure tickets of admission should communicate with A. Connell & Co.



A New Way to more business

USINESS increases as a Chemist's reputation grows. To make his goods more effectively known and held in public memory so that they are recommended and more widely used, we have originated the Unit Carton Idea.

CHEMISTS' **EXHIBITION** STAND

> CONFERENCE -HALL-

June 18th to 22nd

Learn some of its possibilities at our stand at the Chemists' Exhibition.

Make a point of having our brochure entitled "Unit Designs Make Sales." It tells you all about the Unit Idea. Write for it to-day,



The Chemists' Printers Blackfriars London—S.E.1

THE "JARASO" Personal Weighing Machine

British Patent No. 23493/1910

Weighs from I lb. to 20 stone. The weight is reflected automatically in the mirror.

SIZE 11 × 71 × 8 inches. WEIGHT 19 lbs.

RETAIL PRICE REDUCED TO

= each

Liberal terms to Wholesale Houses, Shippers and Export Mer-chants for re-sale in Great Britain, Ireland and British Colonies only.

All particulars from:

For Men, Women, or Children.

SHOPPEE, LTD. ALBERT (SOLE LICENSEES)

Belmont Street, Chalk Farm, LONDON, N.W. 1



Boracic Socks

Finest 4½d. Sock. Quickest and Largest Sale.

BIGGEST PROFIT Retail at 4½d. per pair.

"SPEEDWELL" Boracic Socks Retail at 61d.

Semple Pair and Special Offer.

Terms or application to Make. 8.

London.—Butler & Crispe; May, Roberts & Co.; Barclay & Sons; F. Newbery & Sons; Sutton & Co.; Edwards & Sons; Arthur Berton, Ltd.; Sangers, etc.

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Or direct from the Makers-

R. H. ALLEN & CO., MANUFACTURING CHEMISTS — SYDENHAM LONDON, S.E.26

Telephone: Sydenham 2220.

Why do the public purchase

Tooth Brushes from Chemists?

They require the same quality and reliability as they demand in medicines.

Until recently Chemists have retained 90% of the Tooth Brush trade, by selling reliable ENGLISH brushes and leaving the cheap foreign brushes to the fancy shop.

The 2/6 English Tooth Brush shows the Chemist 1/- gross profit

Less 4d. assistant's time and overhead costs ... = 8d. nett profit.

The 1/- foreign Tooth Brush shows the Chemist 5d. gross profit

Less 4d. assistant's time and overhead costs ... = 1d. nett profit.

The 9d. foreign brush shows the Chemist 3\(\frac{3}{4}\)d. gross profit

Less 4d. assistant's time and over- 1d. nett head costs ... = 4 loss.

The same applies to profits when substitutes are supplied. The customer also judges your other goods on the same footing.

The ADDIS in the BLUE BOX

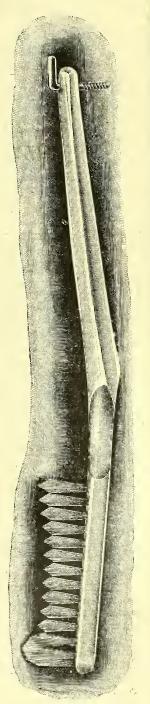
Reg. Design 593367.

Manufactured in England and Guaranteed by THE OLDEST FIRM OF TOOTH BRUSH MANUFACTURERS IN THE WORLD, is the Tooth Brush the PUBLIC REQUIRE.

Shows the Chemist the correct profit. Brings repeat custom.

ADDIS in the BLUE BOX has the proved largest British sales.

WARNING.—It is illegal to make, sell by wholesale or retail, infringements of ADDIS Reg. Design, Brush or Box.



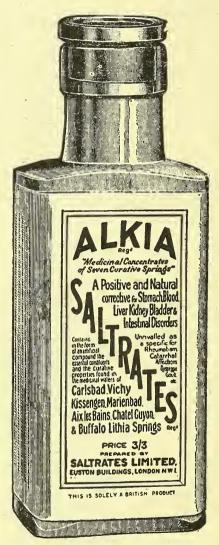
Reg. No. 593367.

Two Lines which you, Mr. Chemi

They always mean a pleased and satisfied Custo

With the help of our advertising you has second and each successive sale is as

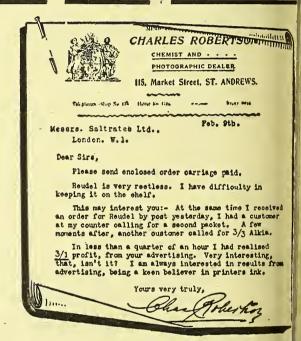
SOME TRULY REMARKA



ALKIA SALTRATES.

A widely advertised and quick selling product, which represents the maximum of possible efficiency in a saline, and the best value obtainable for the money. Being highly concentrated, exceptionally small doses are sufficient, and there is no trace of any salty or other unpleasant taste.

Protected on P.A.T.A. at the full face value of **3/3** a large bottle.



WHAT PROMIN

JIMMY WILDE, World's Champion Boxer:

"I am glad to testify to the part your Saltrates fulfil during m raperiods. I am never without both and never will be."

A. F. (PEGGY) BETTINSON, Founder and Ma Le National Sporting Club: —"I have no hesitation mending both Alkia Se at Roudel Bath Saltrates for all disorders arising from urio ac Personal use satisfies me that no other preparations can equal your for the elimination of the many ailments for which you advocated You have liberty to use my testimony in any manner desired."

"While a physical instructor in the army I found both Alkia a R to be almost indispensable for correcting and preventing the pains to which Tommies are subject. Personally I take Alkia and Reudel is always added to my bath."

We have hundreds of similar letters w

YOU CAN STOCK THESE GO

Carriage paid in United Kingdom on orders for 3 dozen, ich sent free on request. Display them in your window, a

h Recommend with Full Confidence

use they do exactly what our advertisements say.

se products the first time only. quality of the goods themselves.

TIMONY FROM CHEMISTS

REUDEL BATH SALTRATES.



cesre. Saltrates Ltd., London. W. 1.

April 24th.

r Sire;- I was reading through reproduction of Mr Robertson's : andress) letter on page twelve of to-day's date Chemist & ugglet and I think this afternoon I eurpseed his feet, in my shep above. Four customers follows, purchasing Saltrates preparations.

2/- Reudel Bath Saltrates 3/3 alkia Saltrates 5/4 Reudel Bath Saltrates 5/3 0r 50 0r 50

er cn in the dey I was asked for another 2/- size Reudel, but in a case the customer would not teke the 3/3 size, so I missed the e, having just sold the lest small packege. I am quite prepared suffit that this is a coincidence that does not often occur, and hably was in part due to other brother Pharmacists being "Sold "But your preparations are always good cellers with me.

I thought the foregoing would interest you, and it is clutchy authentic, as my Lady Assistant can witness. If the "fale its adorning" and I may "point a moral", I would say never load your shelves with goods that stick there, but to borrow Robortson's "Netty phrase fill up with "restless" goods, which are tless to the point of removal for "Cash Till Food".

With compliments.
Yours faithfully. Who Cornest

er

ove

EORGE, World's Champion Runner :-

ed Alkia and Reudel with remarkably good results. They are products, as everyone to whom I have recommended them

ONALDSON, World's Champion Sprinter:—

3 no equal for rheumatic and uric acid disorders of all kinds. I bath will keep the joints more supple than a dozen Turkish paths. I could not do without them both.'

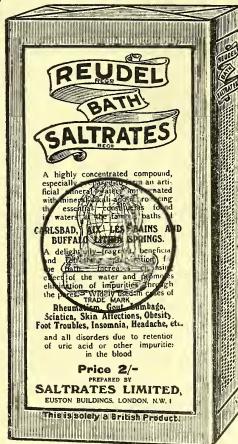
CORRI, of the National Sporting Club and the World's Premier Referee :-

ed both of your Saltrates compounds with the best possible ia is, in my opinion the ideal saline and Reudel could not be

space prevents our re-printing here.

UARANTEED SALE

d. Handsome Showcards of strong selling power less from our present extensive advertising campaign.



The most widely advertised and best selling line of its kind. Unequalled as a fragrant, refreshing, beneficial and all-round factory preparation for the bath or for general toilet purposes.

Especially recommended in cases of foot trouble or rheumatic pains, stiffness, etc. Always extensively advertised.

Protected on P.A.T.A. at the full face values of 2 - and 3/3 (double size). Telegraphic Address—BELTRUSS, TWICKENHAM.

Fig. 601. Inguinal Elastic Truss.

TRUSSES

Telephone-RICHMOND 1557.

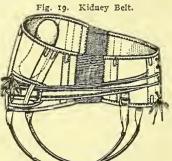
Fig. 641. Peaked Head Scrotal.

SURGICAL SPRING AND ELASTIC TRUSSES. SEAMED AND SEAMLESS ELASTIC HOSIERY. ABDOMINAL SUPPORTING and POST OPERATION BELTS.

SURGICAL CORSETS. SUSPENSORY BANDAGES.



Makers to the Trade of every description of English, French and American Truss Springs. Sole Agents for the United Kingdom of Great Britain, Ireland and The British Dominions of the Celebrated



Crêpe Velpeau Bandages.

THE

R. H. HEWARD Co..

Crown Road Works. TWICKENHAM.

Contractors to H.M. Government.



Richmond Shoulder Brace.

CREPE BANDAGES VELPEAU

NOW

IS THE TIME TO PLACE YOUR ORDER

FOR

BATHING CAPS SPONGE BAGS HOLDALLS

LATEST OUR = **PATTERNS** AND PRICES SENT ON APPLICATION

ARTHUR BERTON, Ltd.

15-17 Worship Street, LONDON, E.C.2.

MANCHESTER and GLASGOW. 36 Chapel St., Victoria Bridge.

Telegrams: "Aybelim, Finsquare, London." Phones: Clerkenwell 1347, 1348, 1349 (Private Exchange).

CHEMIST'S EXHIBITION LONDON 1923

If you were unable to visit the above this week and consequently did not see our Special Window Display, re

Keene's One-Night Corn Gure

write at once for particulars. It will pay you well to do so.

Keene's One-Night Cures Ltd. 52 GRAY'S INN RD., LONDON, W.C. 1.

MEDICAL & SURGICAL PLASTERS

SPECIFY TAYLOR'S.

TAYLOR'S RUBBER ADHESIVE PLASTER.

TAYLOR'S

RUBBER

On Spools.

Surgeon's Quality.

ZINC OXIDE PLASTER.

THE "SALFORD" STRAPPING

(Infirmary Brown Holland).

Supplied in any width.

Special prices on application,

Supplies from the Principal Wholesalers throughout the United Kingdom.

EDWARD TAYLOR LTD.

Latest Price List on Application.

Salford, Manchester.

Ely Place, E.C.1.

Samples on

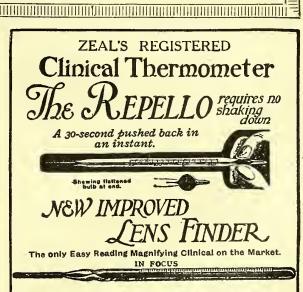
Application.

Contractors to H.M. Government.

Established over 76 years,



FLESH-COLOURED AND INVISIBLE Solo Maftrs, GROUT & CO., LTD., Gt. Yarmouth. London Agent—T. S. Eastaway, 35 Wood Street, E.C.2



OUT OF FOCUS

The square mark engraved on lens front locates the Mercury column Immediately.

\$PECIAL AWARD AND GDLD MEDAL, NEW ZEALAND, 1907
\$(LYER MEDAL, INDIA, 1908. SILYER MEDAL, LONDON, 1913.

All Clinical Thermometers are supplied N.P.L. Tested unless otherwise ordered.

G. H. Zeal, Ltd., Clerkenwell, London, E.C. 1.

Established 1888.

Wholesale Manufacturers of Clinical Thermometers.
Contractors to H.M. Government.
Telegrams: "Zealdom, Smith, London." Tel. No.: Clerkenwell 5202.

A SATISFIED CUSTOMER IS THE CHEMIST'S BEST ADVERTISEMENT

The Marvel Whirling Spray Syringe



Gold Medal Awarded, Paris, 1902. by the Société d'Hygiene of France

as the latest and best improvement in Vaginal Syringes, Particular attention is called to the fact that by reason of its peculiar construction the Marvel Syringe dilates and flushes the vagina with a volume of whirling spray, which smooths out the folds and permits the injection to come into contact with and cleansing the entire surface.

Fully Protected by Patents,









You can safely recommend it.

Has no rival on the market, is well advertised, pays a good profit, quality guaranteed. The MARVEL is returnable for exchange if found defective and reported promptly.

Trade price, 125/- per doz. Retail price, 15/- each.

FASSETT & JOHNSON, Ltd. 86 Clerkenwell Rd., London, E.C.1.

WILSON (RUBBER) GLOVES

(Advertised in "The Lancet.")

SURGICAL, OBSTETRICAL, AUTOPSY, ACID, ELECTRICAL (10,000 volts), HOUSEHOLD. FINGER COTS.

SUPPLIES BY RETURN from STOCK

Enquiries (Wholesole and Export) to :-

The only accredited Agent in Great Britain for THE WILSON RUBBER CO., CANTON, O., U.S.A. The lorgest exclusive manufocturers of rubber gloves in the world

10 CANUTE RD. SOUTHAMPTON.

R. S. BLAKER,

The Best Hand-made Cigarette in a New Packing

Sundried

The Brand to Handle, 1/4 per box of 20,

Carriage paid on any quantity. ALL TOBACCO SUNDRIES.

Enclosure sent to Wholesale London Houses.

SADLER & MOORE, Spital Square, London, E.1



Bathing Caps

From 4/6 dozen.

Deliveries from stock. Samples on opprovo

ALL KIND OF SURGICAL RUBBER COODS: Enemas, Pessaries (Watch Spring) Prolapsus, Patterson's (Dr.) Pro-Race, &c., &c.

JAMES TOMPKINS, Ltd

THE RUBBER HOUSE, 386 CITY ROAD, LONDON, E.C.J

ESTABLISHED 46 YEARS.

"DEPENDABLE **TOBACCO** WHOLESALERS." MIXED PARCELS A SPECIALITY. Established Fifty Years. Price Lists mailed on request.

A PROFITABLE SIDE LINE FOR CHEMISTS.

SINGLETON & COLE, LTD., CANNON ST., BIRMINGHAM.



WM. WARNE & CO. LTD.

> 29 GRESHAM STREET, E.C. 2. India Rubber Manufacturers,

Surgical, Chemical, Domestic Articles, Syringes, Water Beds, etc.





Registered

QUININE-TINTED

DISPENSING BOTTLES

Entirely free from Lead and Arsenic

SAFETY FIRST

The glass is made only from fresh pure materials and is founded in covered crucibles. This is not a cheap way of making bottles, but it ensures that the glass is pure and will not affect the medicines chemically. Cheap bottles are often made by re-melting old and waste glass collected from different sources. The bottles so made may have a very deleterious effect on the contents, and Pharmacists should beware of this danger.

The pre-eminence of the W bottles has been a recognised fact with the pharmaceutical profession for many years, and the progressive chemist cannot afford in these days of keen competition to be without them. The appearance and safety of his dispensing bottles are of vital importance.

"SOLD BY ALL THE LEADING WHOLESALE HOUSES."

WOOD BROTHERS GLASS COMPANY, LTD.

Barnsley

England

SOL-VO SANITARY ROLLS & PACKETS.



Sol-

THE BEST & PUREST

ANITARY PAPER



		per do					per		
Three dozen Ro	olls	7/-	net.	Three dozen	Packets		10/-	net.	
Half gross .	,,	6/6	,,	Half gross	,,		9/6	,,	
One gross	,,	6/-	, ,,	One gross	,,		9/-	,,	
Five gross	,,	5/3	33	Five gross	,,	C 9 D	8/3	,,	
	CADDI	ACE	מואם ז	CASES	PEE				

FORD, SHAPLAND @ CO. Ltd.

LABELS & SHOWCARDS - PRINTERS - CARTONS & ENVELOPES, TURNSTILE, HIGH HOLBORN, LONDON.

TELEGRAMS: FORSHAPCO. WESTCENT, LONDON.

FLEP ONES HOLBORN 5503.



The Best Possible Value in

"THE STANDARD"

(as illustrated)

7/- doz.

78/- 1 gross lot

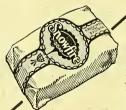
THOS. SWALES

SUNDRIES

20/24 Butts Court & 89 Albion Street, LEEDS

<u>VANDENIA ORANIA OR</u> 14th SEASON.

"MILNER" CLEANER "FOR :: WHITE STRAW HATS Popular Price, 3d. Carriage Paid Parcels: 6 dozen, 10/-; 12 dozen, 19/ 13 to dozen for Cash with order. DISCOUNT: 2½% on 20/- orders; 5% on £5; 7½% on £10. MILNER'S CHEMICAL CO., Liverpool. Stocked by most Wholesale Houses.



A Soap with the "SNOWFIRE" Prestige

"Snowfire" Soap will draw custom to your shop. Free from excess of alkali and containing the special emollient properties which have made "Snowfire" famous, it can be safely recommended for baby's delicate skin or as a toilet soap for the promotion of skin health for either sex.

Write to-day for terms. F. W. HAMPSHIRE & CO., Ltd., Riverside Works,

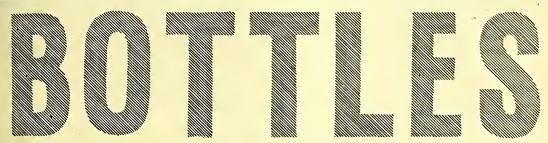
Derby,

s well advertised, offers liheral profits and will prove a custom-drawing addition to your stocks.

When purchasing Scientific or Medical Glassware, Barometers, Thermometers, Hygrometers, Hydrometers, Graduated Measures, etc., in order to be sure that they are British made see that they are marked

66 BRITGLA

the Registered Trade Mark of the British Lampblown Scientific Glassware Manufacturers' Association, Ltd. This apparatus can be obtained from all Laboratory, Surgical, and Druggists' Supply Houses.



FOR ALL KINDS, WRITE TO— FREDK. YOULDON

(Formerly Proprietor of E. YOULDON, Established 1840)

Phone: London Wall 3529.

Portland House, 73 Basinghall St., London, E.C.2 "Telegrams: "Youldon, Stock, London."

HEMISTS SUNDRIES LIMITED 15. CHAPEL ST., MANCHESTER

Special Offer for June BOXED HYGIENIC FEEDERS

78/- Gross.

Complete in Box with Teat, Valve and Brush.

WESTMINSTER

COLLEGE OF PHARMACY.

Principals:
G. S. V. WILLS, Ph.C. (Founder), P. H. WOODNOTH, Ph.C., F.C.S.

Revision Course for October Examination— AUGUST 14th. Full Course and Evening Classes commence OCTOBER 9th.

For full particulars apply to the Principals,

190 CLAPHAM ROAD, S.W.9.

London College of Pharmacy

Principals:
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The Secretary, 361 Clapham Road, S.W.9

MANY SUCCESSES IN THE EXAMINATIONS!

Your Opportunity to

ACTICAL WORK. Students taking the Course may receive personal tuition in the practical work AT ANY TIME DURING THE COURSE.

Expert Tuition for the SIGHT-TESTING DIPLOMAS of the Worshipful Company of Spectacle Makers (F.S.M.C.); the British Optical Association (D.B.O.A.), or the National Association of Opticians (F.N.A.O.).

Write for full particulars—C. A. SCURR, M.P.S., F.S.M.C., F.I.O., F.N.A.O., etc. 64 High Street



MENTION

ROBINSONS' MAKE

WHEN ORDERING FROM YOUR WHOLESALE HOUSE YOUR NEXT SUPPLY OF

PILL BOXES

SUPPORT HOME INDUSTRIES.

ROBINSON & SONS, LTD.

BOXMAKERS TO THE CHEMIST TRADE

CHESTERFIELD.



When ordering your next supply of tubes remember that Venesta collapsible tubes possess a quality and finish that make them a real selling force.

They are made from Pure Tin, Lead or Lead-coated with Tin and supplied plain or enamelled and printed with designs to suit customer's own requirements.

We also supply Lip-salve Cases, Sprinklers, etc., and shall be pleased to forward illustrated lists, samples and current prices on application to—

G. Dept.

VENESTA LTD.

Great Tower Street, London, E.C.3.

Actual Manufacturers of TINFOIL

Plain, coloured and embossed in any size, gauge or shape.

Aluminium Ointment Boxes

Fill the gap between the chip box and the porcelain pot. Try an assorted dozen.

You will find them just what you want.



₹ oz.







I oz. TALL. FLAT SHAPE NESTED.

PRICES (Either shape, tall or flat.)

Per gross: $\frac{1}{4}$ oz. 10/6 $\frac{1}{2}$ oz. 13/6 1 oz. 18/6 2 oz. 30/-

The 2 oz. tall shape is similar to the 1 oz. size but twice the height. Chemists everywhere are taking up the use of these for their preparations. CARRIAGE PAID ON ORDERS OF \$3 AND UPWARDS.

A discount of 5 per cent. for prompt cash is allowed on all amounts of 10/- and upwards. Money returned if goods are not satisfactory. Write for New Price Lists of Druggists' Sundries, Toilet Requisites, Rubber Goods, Cut Sheet Rubber Appliances, etc.

BURGE, WARREN & RIDGLEY, Ltd., 91 & 92. GREAT SAFFRON HILL.

"IMPERIAL BEE" brand

Packed in 1's and 1's Glass & Monopots, etc.

Nature's own: Sweetmeat, Food, Medicine. Guaranteed pure. Stock the best and increase your trade.

The author of "Science of Eating" says:—
"We are lengthening life by modern sanitation, by saving infants, etc., while killing off men and women in the early forties with diabetes and obesity. For a hundred reasons, all of them compelling, let us eat less sugar and more Honey."

A lady shopping on the South Coast told her grocer:—

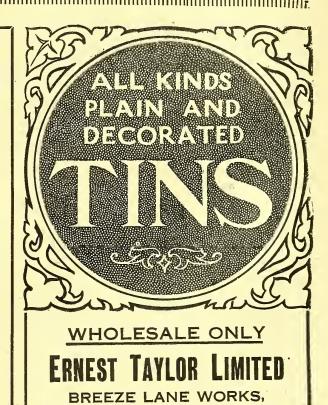
"I didn't know Honey was so nice until I tasted 'IMPERIAL BEE.' I shall always keep it on the table now."

Apply for full particulars and prices to:-

A. J. MILLS & Co., Ltd.,

Produce and Canned Goods Dept., 14, TOOLEY STREET, LONDON, S.E.1

Sole European Agents for :—
THE NEW ZEALAND HONEY PRODUCERS' ASSN. LTD.



WALTON, LIVERPOOL



Deserves Your Recommendation

Superior by every valid comparison to all other Malted Milks, HOOKER'S preparation is well worthy of your constant recommendation.

For complete solubility, delicacy of flavour, easy digestibility, and unqualified nutritive power, HOOKER'S is equalled by few dietetic compounds and surpassed by none.

And HOOKER'S is withal a profitable line to handle.

"Lancet" Analysis and Sales Promotion Material Gratis.

THEW, HOOKER & GILBEY, LTD., BUCKINGHAM.

I.T. 16

The DIGESTIVE NUTRIENT

Over Forty Years' Reputation

MALTINE (Trade Mark)

MALTINE with COD LIVER OIL

MALTINE with C.L.O. and HYPO.

MALTINE with CASCARA

MALTINE with CREOSOTE

Etc.

MALTOLINE (Trade Mark)

MALTINE with HYPO.

MALTINE with IRON

MALTINE with PARAFFIN

MALTO-YERBINE (Trade Mark)

Etc.

MALTINE MANFG. CO., 9, HOLBORN VIADUCT, LONDON, E.C.1

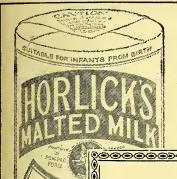
Maline

GEDAND

HO COOKING OR PRICE 3:

HORLUCKS MA

SLOUGH BUC



PRICE LIST

PROTECTED RETAIL PRICE

Per Bottle

Per

Dozen

 $7\frac{1}{2}$ **d.** 1/3

Tablet Form

Z/- 3/6

Both Powder and

8/6 15/

Powder Form

7/6 15/- 24/- 42/- 102/- 180/-

Wholesale Price - - less 20%

In £5 lots - less 20% & 5% In £10 lots - less 20% & 10%

Quantities must be figured nett after deducting all discounts.

We do not supply direct, or pay carriage on less than £10 parcels, and orders may include all sizes, but should be for full dozens of any sizes, except the 8/6 and 15/-, which may be included in less than dozens.

We reserve the right to supply in the fewest packages possible, but will endeavour always to meet the views of buyers in this direction.

Terms: 30 days nett. 1% for cash within 7 days from date of Invoice.

Made in England by

HORLICK'S MALTED MILK COMPANY, Slough, Bucks.

Attractive advertising matter for display and distribution sent free and carriage paid on application. The Original



FREDK. FINK & CO.,

10 & 11 MINGING LANE, LONDON, E.C.3, SPECIALITIES .- Gums Arabic and Tragacanth as imported or finely powdered.



This popular article is largely advertised and stocked by all Wholesale Houses, Trial Size 8d., per post 10d. 1/4 size, per post 1/7; 2/6 size, per post 2/10; 3/9 size, per post 4/3 8d.; 6/4 oz.; 1/4 size, 1/2/doz.; 2/6 size 24/4 doz.; 3/9 size, 36/4 doz.

HE SHADEINE CO., 58 WESTBOURNE CROVE, LONDON, W.

DOOMO AIRSHIP FLY BAND



Write for quotations A wide, long band, sticky on both sides.

SMITH & CO., Doomo Works, NEWARK

ure Food Gelatine

Our entirely new works at Ghent produces gelatine of all grades conforming to the most severe Pure Food Laws of all countries.

Sole Agent for U.K., Colonies and U.S.A.:

PAUL INGENLATH. Monument Buildings, LONDON, E.C.3.

Phone: Minories 2576.

Cables and Telegrams : " Ingenlath, London."

SOCIETÉ GENERALE BELGE DE PRODUITS CHIMIQUES Works also at CHENT BELGIUM AISEAU-HEMIXEM(ANTWERP) & MORNIMONT

ROSE'S DAY CREAM

12/- per doz.

1/6 per pot retail.

A really high-class vanishing cream put up in dainty rose pink cartons.

A. V. ROSE & SON, 53, Kirkstall Road, LEEDS.

PERFUMERS—SAVE

Headquarters for : Vanishing Creams, Shampoo Powders, etc., in bulk or packed. Samples and prices on request. Makers of the "O-Pine-O" Toilet and Household Soaps. The special feature of these soaps is that they contain all the natural Glyceriue.

A trial will convince as to the very high quality of these goods, "O-PINE-O" MFG. CO., LTD., Montague Rd., Hornsey, London, N.S.

and MAKE MONEY

THOS. CHRISTY & CO.

Probably the best value yet seen—new type of carron beautifully gotten up and displayed, carrying a superfine line of popular Dental Creams. Gives an excellent profit, and anyone starting the trade in the district practically takes the lot.

Ask for sample and leaflet, and learn about this 50% profit line.

4-12 Old Swan Lane, E.C.4

4-12 Old Swan Lane, E.C.4

RANGE

JRANTII B.P.) Prepared in strict accordance with the Formula of the British Pharmacopœia. (Wholesale only, Samples from Head Office, Thomas Street, DUBLIN, or London Office, 74 Great Tower Street, LONDON. E.C. 3.

"BEST for MOTHER and BABY"



Equals Grade "A" Milk 5 oz., 10 oz. and 16 oz. net. Decorated air-tight tins. Retail Price .. 1/6, 2/- and 2/6.
2 oz. Samples free.

SPECIAL QUOTATION TO CHEMISTS FOR BULK. Manufactured by

PRIDEAUX'S FOOD ETC. COMPANY, LIMITED,

PRIDEAUX'S FOUD E.C. COMPANY, LIMITED,
Pioneers of the Dried Milk Industry. Eight
Creameries in Dorset, Somerset and Wilts.
London Office: 16 Southwark Street, S.E.1.
Send for Trade Terms and full particulars to:
PRIDEAUX'S FOOD etc. Co. Ltd.

MOTCOMBE, DORSET.

VITAMOGEN

(VITAMINES)

INVALUABLE FOR SLEEPLESSNESS **NERVOUS DISORDERS** CONVALESCENCE AND

INFANTS.

Retail Price -2/- and 4/6.

To be obtained of All Chemists, or direct from

VITAMOGEN, Ltd.

(DEPT. C)

24/26 Holborn, LONDON, E.C. 1.

Do you believe in Advertising?

Some chemists say that Advertising is "unprofessional." It may be, but that does not mean to say it is derogatory to one's best interests. One cannot separate the respect owed to the Pharmacy or to oneself—they are inseparable!

Advertising as practised to-day is a respectable, common-sense, profitable business proposition —a means of building a bigger and better business, something that no modern Pharmacist can afford to ignore.

We shall be happy to prepare for you, without charge, a personal Advertising Campaign for Press Advertising or any other form of publicity-Circulars, Form Letters, Booklets, etc. We will supply you with ideas, first-classlay-outs, copy, blocks, and all necessary printing instructions for such a campaign. In addition, in certain circumstances, we are ready to pay half the cost of the newspaper space or cost of printing.

CUT THIS OFF AND POST TO-DAY TO



CO-OPERATIVE ADVERTISING DEPARTMENT, 56, OSNABURGH STREET, LONDON, N.W.1.

Please send me full particulars of your Co-operative Advertising service, I attach my printed address label hereto,

C. AND D., JUNE 23

Movol sells itself and brings an exceptionally fine return—a net profit of

Cost Price.

381/2%

The little counter box of Movol tubes is all that is required to remind your customers of a constant need.

The following is the PERMANENT basis on which Movol can be obtained:

Selling Price.

2 doz. 6d. Tubes 8 - 0 1 doz. 1/- Tubes 8 - 0

Net profit 10/-, i.e. 381%

12 - 0 2 6d. Tubes 12 - 0 1 1/- Tube

5% more than the usual profit.

If I/- size Tubes are not desired we will supply three or four dozen 6d. Tubes with corresponding number of Bonus Tubes.

This little figure tells your customers about Movol.

Advertisements are appearing regularly in the Daily Mail, Daily Sketch, and News of the World.

MOVOL IS A SPLENDID LINE FOR CHEMISTS

Easy to stock-no trouble in saleno weighing, no measuring.

We pay carriage and supply suitable Advertising Material.

Sole Makers:

WM, EDGE & SONS, LTD., BOLTON



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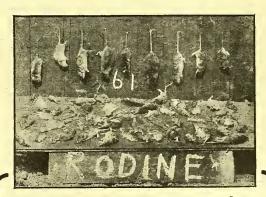
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We hereby undertake to surrender to them for destruction all circulars, labels, price lists, advertisements or other printed matter in our possession or under our control in which the words 'TABLOID' or 'TABLOIDS' are employed where products of their manufacture are not intended to be designated, and agree to one publication of this apology.

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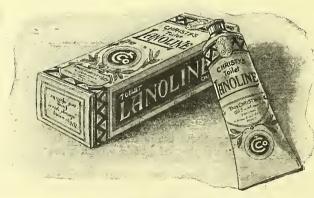
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C. & D. Stock-taking Sheets

THOSE chemists whose financial year closes at the end of June, and who require to take stock, should note that the C. & D. Stock-taking Sheets halve the labour of taking stock. The items are arranged on ruled paper in the same order as in the C. & D. Retail Price List, which is afterwards employed for pricing out the articles, the amount of each column being then transferred to specially ruled pages at the end of the pad. Hints on stock-taking are given on the inside of the cover. The items in the Stock-taking Sheets cover all drugs, chemicals and galenicals found in chemists' shops, and, being in alphabetical order, are easily found for entering up. By means of the Stock taking Sheets one person can take the more experienced calling out the quantity of the drug, etc., and the other entering it in the Stock-taking Sheets. The price of the complete pad of Stock-taking Sheets is 2s. 6d., post free, cash with order.

English and Welsh News

The Editor would be obliged if subscribers will send him marked copies of newspapers containing items of in-terest for insertion in this or other news sections.

Export of "Dangerous" Drugs to Irish Free State

The Home Secretary has issued a notice reminding traders that export licences are now required before any consignment of "dangerous" drugs (including those preparations which are exempted from the Regulations governing dealings in this country) may be sent from Great Britain, Northern Ireland, or the Isle of Man to the Irish Free State. As a temporary measure, the Government of the Irish Free State has decided to almit these exemptors just the Irish Free State without the these consignments into the Irish Free State without the production of an Irish import licence. (See C. & D., June 9, p. 795.)

Maw Challenge Shield Competition

The inter-association sports for the Maw Challenge Shield took place on June 13 and 14, on the ground of S. Maw, Son & Sons, Ltd., New Barnet. The sun was kind, and a large number attended. For the Wednesday competitors, between the South-Western and Ealing Associations, nearly 250 were present, including many from the North. On the Thursday the number was over 600, the sports ground presenting a very animated appearance. The South-Western, the winners from Wednesday, court on their terms to continue in the from Wednesday, sent on their teams to continue in the struggle for supremacy. The competitions were :—Golf, 18 holes; bowls, 9 ends; tennis (mixed doubles); quoits, 14 yd.; and putting and croquet for the ladies. The Barnet Excelsior band gave a selection of music each day, and, after the competitions, provided music for day, and, after the competitions, provided music for dancing on the lawn; and a concert took place in the pavilion. Tea was served in a large marquee about five o'clock, and refreshments later. The final_results, which were obtained by 8.30 o'clock, were as follows:—Walthamstow, 15 points; Western, 13½ points; South-Western, 13½ points; Northern, 9 points; West Ham, 4 points; Eastern, 4 points; South-Eastern, 3 points; Ealing, no points; North-Eastern, no points. The smallest and most recent association in the metropolis became holders by an undisputed and popular win. became holders by an undisputed and popular win. A hearty vote of thanks was given to the House of Maw, and Dr. H. T. Maw replied in a short, felicitous speech.

Contracts

The following tenders have been accepted by the bodies named :-

Newcastle-under-Lyme Guardians.-Poole & Son, chemists, drugs.

Romsey Guardians.-Mr. F. Oram, Ph.C., surgical dressings.

Birmingham

Cadbury Bros., Ltd., headed the list of contributions to the Birmingham Hospital Saturday Fund with the sum

The Curtis Surgical Appliances. Ltd., 74 and 76 Hill Street, who are in voluntary liquidation, are calling a meeting of creditors for June 25, 1923, at 11.30 a.m.

About ninety members of the local Association and friends visited the Hounslow laboratories of Parke, Davis & Co. on June 13. Leaving Birmingham at 9 a.m. they were met at Paddington by Mr. Tyler, sales manager for Messrs. Parke, Davis, and conducted in motor coaches to Hounslow. Here Mr. E. T. Neathercoat. President of the Pharmaceutical Society, joined the party. A group photograph was taken, and this was followed by lunch, Mr. Cathcart, works manager, presiding, and Mr. Fisk, European manager, was also present. The inspection of the works was interesting and instructive, the party being divided into small groups, to whom repre-About ninety members of the local Association and party being divided into small groups, to whom representatives explained the operations. At tea Marshall and Mr. Mann again expressed the thanks of the Association. A collection for the Society's Benevolent Fund amounted to £4 10s. Birmingham was reached on the return journey at 9.10 p.m. The annual excursion will take place on July 4 to Stratford-on-Avon.

Holl

A movement is on foot for a "Brighter Hull." Chemists' windows are already doing their bit, since several interesting displays are now being shown.

Judging by the correspondence columns of a local newspaper, Hull people are becoming interested in, and alarmed about, their acid atmosphere (C. & D., June 2, p. 755).

Educational evening classes, at which students of pharmacy may take their first year's course, given at the Hull Young People's Institute, are in danger of being closed down as a result of applying the "axe."

Leicester

Two applications have recently been made for licences under Section 2 of the Poisons and Pharmacy Act, 1908. Local chemists consider the granting of these facilities to be quite unnecessary, as there are few places in which the services of chemists are more available than Leicester.

Satisfactory progress is being made with the fund promoted by the local pharmacists with the object of equipping a pharmacological laboratory at Leicester University College. This scheme was first instituted by Mr. Goodess when he was President of the local Society. The laboratory is for post-graduate study.

The weather is adversely affecting most businesses in this district. There is small demand for summer medicines, and though this may be counterbalanced to some extent by sales of remedies for colds, lemonade powders and similar substances for summer drinks are in comparatively slight request. One Leicester chemist says the only people who appear to be making money this year are the coal merchants.

Liverpool

Mr. J. R. Crosher, for many years assistant with Mr. G. R. Tharratt, Myrtle Street, is leaving the drugtrade, having taken over a well-known hostelry in Wrexham.

Some Government departments seem to have dropped the severely formal and frigid attitude in their correspondence. The Post Office Telephone Department is supposed to have led the way, and now the Income Tax Department announce "that they have pleasure in agreeing the income tax liability to be"

Towards the expenses of the Welsh concert to be given during the Conference in London next month, the Liverpool chemists of that nationality have responded well. Mr. H. Humphreys Jones, Ph.C., A.I.C., principal of the Liverpool School of Pharmacy, who is a keen enthusiast in all matters appertaining to the welfare of Wales, heads the list of donations.

An old-established firm of analytical chemists and assayers report that they are exceedingly busy. Specimens of ores are coming in from all over the world, from new as well as old mines, where there is a prospect of their being reopened. On the other hand, one of the richest and best-known men in Lancashire takes a very gloomy view of the outlook, unless trade begins to improve very soon.

The picnic arranged by the local Association to Chester is being well supported. Mr. Cecil Owen, B.Sc., has the unique distinction of having helped the Manchester Pharmaceutical Association when they made their trip to Chester two or three years ago, and now he has done the same for Liverpool. Those who went on the last excursion some years ago to the ancient city have not forgotten the experience of arriving back at the Liverpool Landing Stage at the early hour of two in the morning, and having to walk home. In those days there was no summer-time, but they did enjoy real summer weather.

Manchester

Mr. D. Abrams, chemist and druggist, has opened another branch at 300 Great Cheetham Street West.

At Manchester City Police Court, on June 18, Vincent Ryder, Douglas Stewart and William Clarke, described as being of no settled abode, were remanded on a charge of being in unlawful possession of a case containing sixteen tubes of morphine and cocaine salts and other "dangerous" drugs.

An inquest was held by the Manchester city coroner, on June 18, ou the body of James Clarke, an old man living at Moston with a son. The evidence showed that Clarke purchased some chloroform and took what he described as "a good ounce." A verdict of "Suicide while insane" was given.

Mr. H. Sutcliffe Smith, presiding at the annual meeting of the Colour Users' Association in Manchester, on June 19, referred to the high price of dyes, and urged that if British makers could not meet the users' request for lower prices without financial assistance, a grant-in-aid should be made by the Government. He held that the sum of £1,000.000 derived in this country from the sales of German dyes should form the nucleus of a fund to support—the British dye industry, and suggested that if the total of the proceeds of the sale of Reparation dyes was now placed at the disposal of the British dye-making industry through an independent committee, it would probably form the basis of a fund to support the industry for a further period of two years.

The Manchester city coroner held an inquest, on June 13, on the body of John Winchester, a young student at the College of Technology, who died as the result of burns received there while purifying methyl alcohol in the main laboratory. A fellow-student having given evidence as to the circumstances of the accident, Professor Frank Lee Pyman said that Winchester told him on the morning of May 30 that he was going to do some work for which he needed methyl alcohol, and asked if the spirit should be dried. Witness answered "Yes." The fire was caused by the breaking of the flask containing the methyl alcohol and caustic potash. It was impossible to say what caused the breakage. Witness was satisfied that there had been no defect in either the flask or its contents. Winchester was not doing anything injudicious, and though the quantity of stuff which he had was large it was not abnormal. The operation was one of the most elementary undertaken by students. A verdict of "Accidental death" was recorded.

Miscellaneous

Cost of Living.—It is announced by the Ministry of Labour that, on June 1, the average level of retail prices of all commodities taken into account in Ministry of Labour statistics was about 69 per cent. above that of July, 1914, as compared with 70 per cent. on May 1, 1922, and 176 per cent. on November 1, 1920.

Wholesale Druggists' Cricket Championship.—A match between elevens representing May & Baker, Ltd., and The British Drug Houses, Ltd., played at Crouch End, on June 16, resulted in a win for the former, the scores being 88 and 43 respectively. For the victors Wheadon scored 39, Powell took four wickets for 10 runs, and W. Toms three wickets for 6 runs.

INQUEST.—An inquiry was opened by the West London coroner, on June 18, into the death of the Rev. Ernest Street, who was found dead at his residence in Eardley Crescent, S.W. A medical witness stated that a blue bottle found contained mercuric chloride tablets, and the inquest was accordingly adjourned (no satisfactory explanation of the death being forthcoming) for the customary analysis.

Major course at Cardiff.—A course of instruction for the Major examination of the Pharmaceutical Society is being established in connection with the Welsh College of Pharmacy. The full-time session will commence in October, and Mr. H. M. Lloyd, J.P., a member of the Pharmaceutical Society's Council, has offered a prize of the value of £5 5s. to the first student at the College who passes after taking the course. The fee is to be £15 15s. for the October to July session.

IN THE COURTS.—In Brentford County Court recently, Mr. D. H. Edward, Bishop's Stortford, obtained judgment against Mr. Herbert Campbell, Isleworth, in a claim for the sum of £100 obtained by the defendant by fraudulent misrepresentation in connection with the

sale of a photographic formula. An order was made for payment in fourteen days, with costs.—At Monmouth Assizes, on June 16, William M. A. Morgan, who had been committed for trial on a charge of murder (C. & D., April 28, p. 572), was formally discharged.

SALE OF FOOD AND DRUGS ACTS.—The current report (No. 258) of the medical officer of health for the City of London records the examination of a sample of cocoa which was found to contain 0.009 gr. of arsenic per lb. The sample was received from "an outlying residential area," but cocoa dealt in by the City wholesaler, by whom it was believed to have been supplied, was reported free from arsenic. Other articles examined during the period covered by the report include currie powder, Epsom salts, sulphur, zinc ointment, and ground cinnamon.

statements were made by the principal (Dr. Tom Jays) and the treasurer (Mr. R. L. Barclay) as to the work of the past year and the financial position of the College, it being pointed out that if a sufficient work it being pointed out that if a sufficient number of students were sent to the College regularly there would be no need to appeal for financial support. An urgent appeal is necessary, however, as about £500 is needed before the end of the current financial year. The chairman said that he felt the work of Livingstone College is more needed than ever at the present time.

REXALL CONFERENCE.—A meeting of Rexall agents was held at the Waldorf Hotel, London, on June 20, Mr. W. C. Church, chairman of the United Drug Co., presiding. Mr. Louis K. Liggett addressed the gathering; and Sir Charles Higham, in a breezy speech, counselled optimism, and paid a tribute to the enterprise of British chemists. Sir Charles said that chemists were showing better window displays. They advertised. They sold better window-displays. They advertised. They sold trade-marked goods that were advertised in the Press, because they knew that only good goods were advertised to-day. They were finding out that newspaper advertising was the cheapest way to increase turnover. They had "bucked up" and were prospering. "We are a nation of shopkeepers," added Sir Charles. "Let us be the best shopkeepers in the world. Let courtesy be a common practice with our customers. Remember it is a sound axiom 'that the customer is always right.' Be proud of your business."

DANGEROUS DRUGS ACT CHARGES .- At Marlborough Street Police Court, London on June 14, Julian Pinder was sentenced to three months' imprisonment in the was sentenced to three months' imprisonment in the second division, and George H. Johnstone and Marjorie Hatton were bound over, on charges of being in unauthorised possession of morphine tablets (C. & D., June 16, p. 832). Pinder admitted having obtained supplies on 159 occasions. The magistrate, referring to Part 3 of the Dangerous Drugs Act, said he had very grave doubts whether the Regulation "that no person shall be in possession of any of the drugs" was valid. It was in contravention of a well-recognised rule of law that no person cheuld be represented to the criminal law. that no person should be responsible to the criminal law for any act unless it was prejudicial directly to some other person.—At South Shields, recently, two Japanese seamen were each sentenced to two months' imprisonment for being in unlawful possession of cocaine hydrochloride. At Marylebone Police Court, on June 19, Edgar Manning, described as a musician, residing in Lisson Street, was remanded on a charge of being in unauthorised possession of opium and cocaine.—At Twickenham, on June 19, Frederick H. Vardy was charged, among other things, with being in unlawful possession of morphine tartests the identity of which was certified by Mr. Ichn trate, the identity of which was certified by Mr. John Edward Byles, a Government analyst. The accused was fined in respect of two other charges, that of unlawful possession of the morphine salt not being proceeded

PRIVATE ARRANGEMENT.—The creditors of Mr. P. Grant, chemist, 5 The Parade, Sundridge Park, Bromley, were called together recently, when a statement of affairs disclosed liabilities of £506 6s. 10d., all due to trade

creditors. There was also a fully secured creditor for 290. The assets amounted to £642, from which had to be deducted £38 12s. for preferential claims, leaving a surplus of £97 1s. 2d. The assets consisted of :—Cash, £12; stock-in-trade, £250; fixtures, fittings and utensils, £85; household furniture, estimated to realise £140; lease and goodwill, £115; and book-debts, £40. It was reported that the debtor commenced business in May 1921, and took over the lease for a period of seven years 231 at an inclusive rental of £1 per week. He spent over £100 in fitting up the premises. The average turnover during the last twelve months had been something like £36 a week. Mr. Parkin S. Booth (Association of Manuforther Mr. Parkin S. Booth (Association of Mr. Parkin S. Booth (Association facturing Chemists, Ltd.), stated that the debtor desired to continue the business, and thought that he could set aside a certain sum weekly in order to discharge his liabilities. It was decided to confirm the deed of assignment already executed to Mr. Booth, and a committee was appointed consisting of the representatives of The British Drug Houses, Ltd., Kodak, Ltd., and W. Sutton British Drug Houses, Ltd., Kodak, Ltd., and W. Sutton & Co. The following are among the creditors: Atkinson & Co., Ltd., £13; Ashton & Parsons, Ltd., £10; The British Drug Houses, Ltd., £105; Butler & Crispe, £21; Evans Sons Lescher & Webb, Ltd., £16; J. C. Gambles & Co., £11; D. & W. Gibbs, Ltd., £10; Healey, Royle & Co., £36; Kodak, Ltd., £17; S. Maw, Son & Sons, Ltd., £11; W. Sutton & Co., £100; Vinolia Co., Ltd., £22; Wright, Layman & Umney, Ltd., £10.

Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur.

Tuesday, June 26

Glasgow Pharmacy Club.-Angling competition on Loch Leven.

Wednesday, June 27

Institute of Ophthalmic Opticians, Royal Hall, Bristol. Annual conference. Meeting, 11 a.m. Lecture, 3.30 p.m. Dinner, 7 p.m. (tickets 12s. 6d. each). On Thursday, June 23, motor trip to Cheddar 10 a.m. (tickets 15s. 6d. each). Conversazione, 7.30 p.m.

Liverpool Chemists' Association.—Picnic to Chester and the Dec.
Train leaves Woodside Station, Birkenhead, at 2.25 p.m.
Special saloons. Return from Chester 9.6 p.m. Tickets
(10s. 6d. each) from members of Council and secretary.

Manchester Pharmaceutical Golfing Society, Fairfield Golf Club, Buxton. Mr. W. Griffiths Hughes's prize. Train leaves London Road Station at 9.5 a.m.

Portsmonth Pharmacists' Association.—Charabanc trip to Selborne. Fare (including tea) 7s. 6d. The car will start from South Parade Pier at 2 p.m.; members of the party can be picked up at Elm Grove (2.10), Bradford Junction, Fratton Bridge (2.15), and North End (2.25).

Southampton Pharmaceutical Association.—Visit to Brocken-hurst. Charabanes leave the clock tower at 2.15 p.m. Tea, on the invitation of the President, at 5.30 p.m. in the Balmer Lawn Hotel. Charabane tickets 4s. each. Tickets for non-members, 6s. 6d.

South-West London Chemists' Association.—Visit to Parke, Davis & Co.'s Works.

Thursday, June 28

Blackburn Chemists' Association .- Picnic to Bolton Woods. The journey will be made by motor.

Journey will be made by motor.

North London Pharmaceutical Association, Annual outing. Cars start from Tufnell Park at 10.30 a.m. for Guildford and Hindhead for those who are taking part in the all-day excursion, and at 2 p.m. for Guildford for the half-day outing. Tickets 15s. 6d. (for whole day) and 10s. 6d. (for half day), to include conveyance and food, from Mr. Herbert Skinner, Ph.C., Royal Northern Hospital, Holloway, N.

Friday, June 29

Edinburgh Chemists', Assistants' and Apprentices' Association, 36 York Place, at 8 p.m. Practical demonstration of plants collected at the Botanical Excursions by Mr. J. Rutherford Hill. Plants should be received not later than June 23.

MANCHESTER PHARMACEUTICAL ASSOCIATION.—The annual picnic will be held on July 4 at Dovedale. Special saloon leaves London Road Station at 1.20 p.m. for Thorpe Cloud. High tea at Peveril of the Peak Hotel. Tickets (11s. 6d. each) from the secretaries or members of Council.

BIRMINGHAM PHARMACEUTICAL ASSOCIATION.—The annual excursion will be held on July 4. Train for Stratford-on-Avon leaves Snow Hill at 2.7 p.m. High tea at River Restaurant. Tickets 7s. each, or omitting rail journey 4s. each, from secretary.

Irish News

Meeting of Belfast Chemists

Acknowledging the resolutions passed at the recent meeting in Belfast against the proposed registered druggist changes (C. & D., June 16, p. 849) Mr. Fred Storey, President, Chemists' and Druggists' Society of Ireland, has written Mr. Percy R. W. Shinner, L.P.S.I., Secretary, asking if this was a private meeting or was under the auspices of the North Irish Pharmacists' Association. "Would it not have been better (he asks) if the names of those attending the meeting had been added, or at least the number present stated, so that the value of the resolutions passed could be judged?" With regard to the paragraph, "More particularly that section of us who were once registered druggists themselves," Mr. Storey says, "Would it be too much to ask you how many of these were present at this meeting? Licentiates will have a voice in any contemplated changes. I heartily agree with you that all licentiates should be members of the Pharmaceutical Society.

Irish Licensing Bill

The Northern Irish Licensing Bill came before the Senate at Belfast on June 12, for second reading. Sir James Craig, exercising his privilege of speaking in the Senate, said he would like to refer to Clause 2, which dealt with pharmaceutical chemists, druggists, and registered druggists. An amendment would be introduced dealing with the last-mentioned class, as there was some technical difference between them and the other traders. With regard to Clause 12, relating to chemists and druggists, a class of business grew up that had never been anticipated. They had the ordinary business of selling drugs and medicines on doctors' orders and prescriptions; but gradually it was discovered that by getting an "off" licence they were brought to the Government's notice, and therefore it was determined to curtail their power in regard to the consumetries off the promise. In doing so they much abuse had been brought to the Government's notice, and therefore it was determined to curtail their power in regard to the consumetries off the promise. In doing so they must give sumption off the premises. In doing so they must give them compensation, because the fault did not lie entirely with the license, but to a large extent with the lax methods of administering the law. The Bill came before the Senate again on June 14. Viscount Massereeue, for the Government, moved an amendment to Clause 12 respecting the granting of licences to chemists and druggists, in which it was proposed to add the words "registered druggists." He explained that this was a distinct class of trade, and that the amendment was to make it clear that registered druggists as well as chemists and druggists, should not be permitted to sell wine and spirits. The Commons agreed to the Senate's amendments on June 15, and the Bill received the Royal assent through the Governor that day, and is now the law of the land, except in so far as certain parts, which will only become effective on fixed dates. Mr. M. McDonald, President of the North Irish Pharmacists' Association, has written to the "Northern Whig and Belfast Post" pointing out the effect of the new law and stating that, although there never has been any conviction recorded against any chemist for a breach of the viction recorded against any chemist for a breach of the licensing law, yet under the so-called temperance legislation presently passing through the Northern Parliament no chemist shall be allowed to sell a bottle of port wine without a doctor's prescription. There is, he says, no such restrictions in obtaining this article from a public house. It is easy to see the complete absence of logic and consistency on the part of those responsible for the present legislation when these absurd regulations are viewed in the light of reason. Dr. Watson, Belfast, has replied that no wine licence ever granted to chemists was meant to entitle them to compete on equal terms with publicans; yet they have on their own admission done an amount of business "very considerable in some cases," and have even seriously considered the question of "compensation for the business... lost to them through" this measure. These statements are their own, voiced in a great meeting of Ulster chemists. Thus the Government could not ignore the chemists and dare

not leave matters as they were. A chemist's mission is to distribute drugs, not drink. There have been chemists who found the whole affair of port and medicated wine so sordid, so nasty, that they cut it out of their businesses altogether. And the responsible medical Press has never said a word in favour of medicated wines. A "Looker-on" advises chemists to protect their own trade and let the wine go where it likes. He says: "All doctors should be compelled to write prescriptions. It is ridiculous that educated men such as chemists should be compelled to sell wines, cigarettes, and confections to make a living while others are allowed to do the chemist's work. In nearly every little huxter's shop you can buy almost half the items that really belong to the drug trade—headache powders, aspirin tablets, etc. These certainly should only be handled by drug men,"

Brevities

Mr. Robert S. Anderson, R.D., Fivemiletown, Co. Tyrone, has had his premises entirely renovated, electric light being installed throughout, and new show cases introduced.

The Mayo County Council has appointed Mr. Charles McMullan, Belfast, county analyst. Londonderry Board of Guardians have reappointed Mr. R. F. Blake, Belfast, analyst for the Union at £30 per year.

Londonderry

Mr. James E. O'Neill, R.D., Magherafelt, has been re-elected vice-chairman of the Londonderry County Council.

Summer & Co., Ltd., Liverpool, have obtained the contract for supplying Londonderry District Lunatic Asylum with medicines for the ensuing six months.

Scottish News

Brevities

Huntly Town Council has appointed Mr. C. S. Rnle, chemist and druggist, to supply drugs, etc.

Mr. L. Wolfson, chemist and druggist, 188 High Street, Ayr, is giving up business at that address shortly.

Coupar-angus Town Council has appointed Mr. D. McGeorge, chemist and druggist, to supply drugs, etc.
Mr. W. Brownlie, chemist and druggist, was one of

Mr. W. Brownlie, chemist and druggist, was one of the successful competitors at a gala day entertainment held at Skelmorlie recently.

Claims against the estate of the late Mr. H. Inglis, chemist and druggist, whose death was announced in the C. & D., June 16, p. 839 should be lodged with Murray, Gillies & Wilson, solicitors, Burgh Buildings, Irvine, not later than June 25.

Edinburgh

St. Cuthbert's Co-operative Association, Ltd., will shortly open a drug department at Chesser Avenue (Gorgie District).

Edinburgh University Court has been presented with £20,000, in five per cent. War Loan, by an anonymous donor to form the nucleus of a fund to provide a new department of zoology.

Apprentices and undergraduate members of the Edinburgh Chemists', Assistants' and Apprentices' Association are reminded that all entries for the Duncan Botanical Prize must be sent to the secretary by the end of the current month.

Edinburgh Pharmacy Golf Club held a competition over Craignillar Park golf course on June 13, with the following results: Gentlemen: 1, R. S. Simpson; 2, D. Barnetson, J. P. Gibb, D. Pringle (equal). Ladies: 1, Miss Galloway; 2, Miss Robertson.

NEW PARCEL POST RATES to French Indo-China are given in "The London Gazette" of June 19.

Fines were imposed at Stratford (Essex) Police Court, on June 13, on tradesmen for selling or being in possession of packets of tea not showing the net weight.

Legal Reports

Camphorated Oil Cases.—At Lambeth Police Court, London, on June 16, Mr. David Andrew Rees, Ph.C., Coldharbour Lane, Brixton, S.W.9, was summoned for having sold camphorated oil deficient in camphor to the extent of 45.7 per cent. Mr. H. Glyn-Jones, barrister, for the defence, explained that after the sample was taken, the defendant communicated with the manufacturers, who, upon investigation, discovered that the fault was theirs. The magistrate said he felt very sorry for the defendant. It was very hard upon him that he should be brought before the court for a fault which was not his own. The summonses would be dismissed upon payment of £2 2s. costs.—In Glasgow Sheriff Court, recently, Thomas Scott & Co., chemists, Dumbarton Road, were fined £2 for having sold camphorated oil which on analysis was found to contain only 14.91 per cent. of camphor.

Undertaking Given.—In the Chancery Division of the High Court, London, on June 15, a motion was mentioned to Mr. Justice Eve, by Mr. Roope Reeve, K.C., on behalf of the plaintiffs, in the action of Joseph Nathan & Co., Ltd., v. Bell & Reay, Newcastle-on-Tyne. Counsel said the plaintiffs were the proprietors of Glaxo, and they asked for an injunction to restrain the defendants from passing off inferior articles of the same nature as those manufactured by the plaintiffs. The evidence on the main issues consisted chiefly of two instances of test purchases. There was some conflict as to what transpired on those occasions, and it might be difficult to ask his lordship to deal with it on motion. It would, however, be unnecessary to do so, as Mr. Bovill, who represented the defendants, was willing to give an undertaking until the trial of the action, which they both asked to be a speedy one. Mr. Bovill: I give the undertaking, but my clients deny the plaintiffs' allegations entirely. His lordship consented to the arrangement.

Greeks' Sponge Deal.—In the Mayor's and City of London Court, on June 15, Mr. John Theodorou, sponge merchant, 75 Guilford Street, claimed the sum of £47 8s. 5d. against Sapounakis & Cooper, sponge merchants, 39 Gray's Inn Road, on a bill of exchange. Mr. Trustram Eve appeared for the plaintiff, and Mr. Stainton for the defendants, who had paid £3 3s. 6d. into court. Mr. Stainton said the substantial defence was that the bill was handed over to cover the balance of an account. Defendants said that the consideration for the bill had partly failed to the amount of £44 3s. In August, 1922, plaintiff bought a parcel of sponges, which he asked the defendants to sell on commission. He arranged that, if they wanted any sponges for their own stock, they could take them and debit themselves at current market rates. Defendants took out a certain number for their own stock, and sold others on commission. There was a dispute on both those grounds. Defendants had overpaid the plaintiff. Mr. Eve said that his case was that the documents remained with the defendants for fifteen days; then Mr. Sapounakis gave the bill, and the matter was at an end. There were the defendants' own marks on the document. Mr. Sapounakis said he had signed the bill of exchange for £87 without knowing how much he owed the plaintiff. The recorder expressed the view that it was a curious way of doing business. He could not understand defendant signing a bill for £87 if he did not owe it. Mr. Eve said that plaintiff sold the goods and received the cheques direct. The recorder found for the plaintiff for £47 8s. on the claim, with costs, and for the defendants for £2 15s. on the counter-claim, without costs.

"Apothecaries' Hall."—In the Chancery Division, Dublin, on June 18, the case of the Governor and Company of the Apothecaries' Hall of the City of Dublin v. Fine Chemicals, Ltd., was mentioned. Mr. Moonan, for the defendant company, applied that a consent be made a rule of court. The plaintiffs, said counsel, had carried on the business of selling chemicals and drugs at 40 Mary Street until 1919, when they sold the premises to the defendants, having come to the conclusion that

it would be advisable in their interest as a medical body granting diplomas, and in the interest of their licentiates, that they should discontinue the business. The plaintiffs, in their statement of claim, pleaded that in pursuance of the arrangements made between them and the defendants, the latter undertook that the name "Apothecaries' Hall," which now appears on the front wall of the premises in Mary Street, should be removed so soon as the plaintiffs had ceased to use any portion of the premises and had acquired other premises. The plaintiffs, on the acquisition by them of 95 Merrion Equare. requested the defendants to remove the name from the front wall of the Mary Street premises; but the defendants had failed to do so. The plaintiffs claimed an injunction directing the defendants to remove the name "Apothecaries' Hall" from the wall, and restraining them from allowing the name to appear upon any part of the premises or in connection with the defendants' business. The defendants pleaded that by their covenant there was no obligation upon them to remove the words. The consent provided that the words should be removed by the defendants from the premises, the plaintiffs paying £10 towards the cost of removal. The defendants also undertook not to use the words "Apothecaries' Hall" in connection with their business. Mr. Justice Powell made the consent a rule of court.

New Companies and Company News

P.C. means Private Company and R.O. Registered Office

Chiropodists' Supply Co., Ltd. (P.C.).—Capital £10,000. Objects: To carry on the business of manufacturers of and dealers in articles, preparations and equipment used, required or dealt in by chiropodists, manufacturers, refiners and preparers of oils, perfumes and other toilet requisites, chemists, druggists, manufacturers of and dealers in proprietary articles, etc. R.O.: 17 Hanover Square, London, W.

Henry Robinson & Co. (Levenshulme), Ltd. (P.C.).—Capital £2,000. Objects: To acquire the business of a manufacturing chemist now carried on by W. Young, at 10 Park Grove, Levenshulme, Manchester. as "H. Robinson & Co.," and to carry on the business of wholesale, retail and manufacturing chemists and druggists, oil and colourmen, manufacturers of and dealers in pharmaceutical, medicinal, chemical, photographic, industrial and other preparations, soaps, etc. W. Young is sole permanent managing director and chairman.

Sapon Soaps, Ltd.—Meetings of the creditors and shareholders of Sapon Soaps, Ltd., were held at Bankruptcy Buildings, London, W.C.. on June 14. The Official Receiver reported that the accounts filed under the liquidation showed liabilities £62,592, assets £12,357, and a deficiency of £347,772 regarding shareholders. The company was formed in September 1917, with a nominal capital of £200,000, subsequently increased to £300,000. The purchase price was agreed at £10,000 cash and shares to the nominal value of £112,510. The company took over liabilities £45,885 and assets valued at £158,365, of which £125,000 was represented by patents and trademarks. The company also took interests in the Cereal Soap Company, Inc., New York, and the Sapon Soaps of Canada, Ltd. Debentures for £25,000 were issued to secure a banker's loan, and in June 1922 a receiver was appointed, who had sold the whole of the property at a sum insufficient to meet the charge. It followed that, although the business of the meeting was to appoint a liquidator, there remained nothing to liquidate. The failure was attributed to investments in the New York and Canadian companies, to the expenditure of £60,000 on advertising and developing the company, to over-inflation, to lack of capital, and to difficulty in obtaining raw material. The liquidation was left in the hands of the Official Receiver.

Association Affairs

Cardiff.—The final meeting of the South Wales and Monmouthshire Federation of Pharmaceutical Associations was held recently. It was resolved that the duties of the Federation shall be temporarily transferred to the newly-formed Retail Pharmacists' Union Group Executive for the area. Mr. Leo Joseph, J.P., was unanimously elected Chairman, and Mr. S. W. Hague appointed Secretary. The duties of the Group Executive will be the provision of medals for competition at the Welsh College of Pharmacy, Cardiff, and the Swansea Technical College. The amount required shall be raised by a levy upon each affiliated local branch, in ratio to the number of members forming such branch. The following were appointed to form the Advisory Sub-Committee (Pharmacy Department), this Committee acting in concert with the Technical Instruction Committee of the City Council: Messrs. F. D. Phillips, J.P. (Haverfordwest), J. Gower (Llanelly), H. S. Arnold (Cwmavon), H. M. Lloyd, J.P. (Merthyr), L. Joseph, J.P. (Cardiff), A. S. Johnson (Cardiff), Emrys Richards (Tonypandy), with Mr. S. W. Hague as secretary and Mr. A. Hagon as registrar of the department.

Edinburgh.—The Edinburgh Chemists' Assistants' and Apprentices' Association held the third botanical excursion on June 13, when upwards of forty members travelled by train from Waverley Station to Kirkcaldy, where they were met by Mr. J. B. McLaren, President of the Fifeshire Pharmaceutical Association, and Miss Isabella A. Purdie, Ph.C. The latter had obtained permission from Viscount Novar, Secretary for Scotland, to visit the grounds of Raith House, to which she conducted the party. Under Miss Purdie's leadership, assisted by Mr. Rutherford Hill, upwards of two hours were actively devoted to field work in a walk round the famous Raith Lake. Attention was directed to the varied collection of splendid forest trees, many of them of great age. These included two very large specimens of the evergreen oak (Quercus Ilex) and one of the finest examples of the copper beech (Fagus sylvatica purpurea) in Scotland. The remarkable appearance of the foliage of the oak tree this season in Scotland was well exhibited, where these trees stood out conspicuously among the darker green of the elms and the sycamores. Many of the oaks which had been late in developing leaves appeared of a uniform brilliant yellow colour. The oak contains a relatively large proportion of yellow colouring matter (quercitrin). It is the due proportion of the yellow colouring matters or flavonols in the leaf with the blue colouring matters or anthocyanins that gave a natural green foliage. In nature the authocyanins were formed from flavonol derivatives, under the influence of sunlight, combined with an abnormally low temperature, accounted for this phenomenon which had been recorded by many observers in various districts in Scotland this year. Among plants collected were:—Ranneulus bulbosus, Caltha polustris, Aconitum mapellus, Arenaria trinerva, Hypericum perforatum, Rubus areticus. Chrysosplenium oppositifolium, Bunium flexuosum, Mentha aquatica, Nepeta pederacea, Ajuga reptans, Listera ovoda, Ruscus aeuleatus, Potamogeton falcatus, and Aurocaria

London (W.).—The London (Western) Pharmacists' Association have appointed the following officers for 1923-4: President, Mr. Harry Martin; Vice-President, Mr. C. A. Noble; Treasurer, Mr. H. S. Watson; Seeretaries, Messrs. J. P. Ellerington and C. G. Bonner; Social Secretary, Mr. W. B. Falding.

Manchester.—At a Council meeting of the Manchester Pharmaceutical Association on June 14, the following officers for the ensuing session, 1923-4, were elected:—President, Mr. D. Dickson; Vice-Presidents, Mr. R. Simmons and Mr. R. G. Edwards; Treasurer, Mr. Pidd; Secretary, Mr. T. Miller; Assistant-Secretary, Mr. J. Franklin.

Summer Outings

Hasletts' Annual Picnic

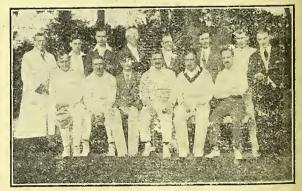
The annual picnic of J. & J. Haslett, Ltd., wholesale druggists, North Street, was held on June 16, the rendezvous being Garron Tower. The party, which numbered over 130, were conveyed in charabancs. Beautiful weather conditions prevailed. The outward journey was via Ballymena and the Glens of Antrim. Luncheon was served at Garron Tower, and the sports, which were a feature of the outing, were held under the shadow of well-wooded hills, which form a lovely background. Larne was reached after a drive around the coast, the party passing on the way the villages of Carnlough and Glenarm. Tea was provided at the King's Arms, and afterwards the prizes offered in connection with the sports were distributed by Miss Pickering (a daughter of oue of the directors). Daucing was indulged in until the time for departure arrived. The Haslett Orchestra rendered selections during the luncheon and tea intervals.

A Jubilee Celebration

The concluding celebrations in connection with the fiftieth anniversary of the founding of Brunner, Mond & Co., Ltd., were held on June 16, when the firm's employees, who with relatives and friends numbered over 23,000, were entertained at a fête at Winnington, Northwich. Similar, but smaller, celebrations were also held at Middlewich and Sandbach. Gold medals were presented to 108 employees who had been forty years and upwards in the firm's service. To commemorate the jubilee the provision of a library and the extension of the recreation grounds at the Winnington, Lostock, and Middlewich works are contemplated. During the week the festivities included a staff picnic at Blackpool, at which Mr. Roscoe Brunner was presented with a silver inkstand; a dinner to the firm's foremen, retired foremen and Mond pensioners, and an "At Home" by Lady Brunner and Mrs. Roscoe Brunner, together with a ball to members of the Winnington Hunt Club. At a dinner given to the members of the club, delegates from the Solvay works in Europe and representatives from the company's foreign offices were present.

Chemists' Cricket Match

The Portsmouth Pharmacists played cricket with the Southampton Pharmaceutical Association on June 13, the Portsmouth team travelling by charabanc to Weston Park, Woolston. At the tea interval, Mr. W. J. Fisk, the S.P.A. President, welcomed the visitors, and Mr. Sparrow suitably responded. The Southamptonians were



THE VICTORS

Top Row: Messrs. Hussey, Sperle, Scorey, Martin, Fowler, Hornsey, Hooper, Williams.

Front Row: Messrs. Altenhein, Atkinson, Lecson, Pearson (captain), Young, Adams.

easy victors, the visitors, who played first, being dismissed for 70 runs, and at 159 for four wickets Southampton declared. In a second innings, Portsmouth made 82. Great admiration was expressed for Mr. Brewis, Portsmouth, who, although over 70, played with all the joy of youth.

Society of Chemical Industry

Professor E. F. Armstrong, F.R.S., President of the Society of Chemical Industry, delivered an address on "Chemistry and Industry" at the annual meeting being held this week in Cambridge. Industry, he said, cannot afford to neglect chemical science and its teachings. There can be no question that the future of industry largely depends on the application of scientific principles to production, and that chemists should be exceptionally competent to advise on such matters. In any technical business—and all manufactures are highly technical nowadays—so long as all goes well the chemist is scarcely required, production being a question of organisation and management. But things never do go well for a long period of time; difficulties are always arising, and it is then that the co-operation of the technical expert—of the scientifically trained man, the chemist—is required.

The progressive manufacturer to-day—and there should be no others—realises this point: it remains for the chemist to fit himself by his training and experience to give the assistance required. If he fail, then science is blamed; some of us in industry to-day feel justified in asking: "Are there not too many failures?" Progressive firms have always had research departments, even though they have not publicly advertised the fact to the same extent as the German dye industry. Much, however, of the work has been more in the nature of the investigation of factory processes, mishaps and troubles, or the seeking of new applications for the firms' products and by-products. Only a limited number of companies have installed separate research departments with a large and independent staff working on a definite plan over a period of years. Naturally it is only the largest corporations that can undertake such a responsibility, and it is or was our national characteristic to prefer to manufacture in smaller units than those of the large corporations on the continents of Europe and America. Furthermore, until recently there was no surplus of skilled research workers.

As a result of the lessons learnt during the war, all this is now to be changed; scientific and industrial research in this country has during the last few years received direct and very definite State encouragement under the auspices of a Committee of the Privy Council, a new Department of Scientific and Industrial Research having been created for the purpose with Sir William McCormick as chairman and Sir Frank Heath as secretary. Perhaps the most interesting venture of this department has been the setting up of what are known as Industrial Research Associations, of which twenty-two are in active operation, and two others have received licences from the Board of Trade. Anyone conversant with the difficulties which confront research in industry will agree that some little time must elapse before results of real practical value are produced, and only a few of the Associations have been in existence long enough to have issued reports giving justification for their existence. After tracing the development of the soda and alkali industry in Great Britain, Professor Armstrong dwelt on the early history of the soap trade. In conclusion he referred to a delicate question which remains to be settled before the profession of chemistry can take rank with medicine or the law: whether the word "chemist" is to have as wide a meaning as the term "engineer" or a restricted meaning like the term "solicitor" or "accountant." The engineer may be at the very peak of the profession or occupy any other grade down to the skilled fitter. By "solicitor" or "accountant" a qualified man is understood. At present they could not even lay claim to a monopoly in the application of the term "chemist," though he did not despair of educating the public on this point, but the outstanding feature is that the chemist may or may not be fully qualified. If they were ever to rank as a profession, Professor Armstrong proceeded, then they must resolutely close their ranks to all but the qualified, possibly using the term "chemist," though he haintaine

capacity, are qualified. The Institute of Chemistry, now that it has filled its ranks and is really representative of the profession, should devote all its influence and resources to attain this end. The harm and the mischief which are being done to-day by unqualified and incompetent—the two words are generally though not necessarily synonymous—persons who style themselves "chemists" is very considerable, far greater than most people realise.

Insurance Act Dispensing

Record of matters concerning Chemists' interests in the National Health Insurance Acts.

Local Reports ENGLAND AND WALES

Blackburn.—At a meeting of the Insurance Committee, on June 14, Councillor W. H. Grimshaw, chemist and druggist, pointed out that there are four separate organisations in Lancashire for the pricing of scripts, and he thought useful economies might be effected by having only one central organisation. Mr. H. Whittaker (clerk) said the No. 4 Bureau was costing Blackburn £175 for the current year, as against £225 for last year. No doubt some economy would be effected by a combination of the character suggested. When the Bureau system was first introduced, however, the Ministry of Health suggested that individual bodies should be limited to the pricing of one and a quarter million scripts per week. That standard had been reached by the No. 4 Committee, and it might, therefore, be regarded as meeting the requirements of the Ministry, in respect of size. Mr. E. Hindle, J.P., said no doubt the Blackburn representative on this committee would consider Mr. Grimshaw's suggestion. A letter from the Ministry of Health concerning the use of methylated spirits in preparations ordered on Insurance prescriptions, and pointing out that persons who used methylated spirits in the preparation of any article capable of being used, wholly or in part, as a beverage or as a medicine, rendered themselves liable to a penalty, was received. The Committee referred the matter to the Panel and Pharmaceutical Committees.

London.—A meeting of the Pharmaceutical Committee was held on June 19, Mr. H. Skinner (chairman) in the chair. The report of the Central Checking Bureau for March, 1923, showed a margin of error of 0.06 per cent. The Committee decided that the details of the new Dangerous Drugs and Poisons Act should be discussed after the issue of the Order in Council. The secretary reported inter alia:—Particulars of dispensing for the month of March, 1923:

Value of ingredients ... £8.386 7s. 3d. £11,098 1s. 3d. 464,262 Value of dispensing fees Number of scripts Average cost per script 10.07d. Number of prescriptions ٠. 585,457 Average ingredient cost 3.44d. ٠. Average dispensing-fee cost.. . .

Particulars in respect of prescriptions dispensed during the first quarter, 1923:

 Cost of ingredients
 ...
 £24.085
 18s. 3d.

 Cost of dispensing-fees
 ...
 £31,734
 2s. 1d.

 Number of prescriptions
 ...
 1,679,430

 Number of insured persons on lists
 1,612,585

 Average ingredient cost
 3,44d.

 Average dispensing-fee cost
 4,54d.

Several matters relating to the pharmaceutical service were considered, including a complaint against a panel chemist. The Committee gave instructions for an inquiry into the matter. The draft annual report was approved for circulation to chemists on the London Panel. In connection with the election of the London Pharmaceutical Committee, there will be no contest in London, and the following gentlemen will constitute the new Committee:—Mr. B. Abelson, Mr. G. B. Barnard, Mr. A. H. Jenkin, Mr. J. Keall, Mr. A. R. Keith, Mr. A. R. Melhuish, Mr. J. Milner, Mr. C. A. Noble, Mr. P. B. Phillips. Mr. D. A. Rees, Mr. G. Roe, Mr. H. Skinner, Mr. P. Sparks, Mr. J. A. Thompson, Mr. W. B. Trick, Mr. A. J. Wing.

Pharmaceutical Society of Ireland

Council-meeting

THE monthly meeting of the Council of the Pharmaceutical Society of Ireland was held at 67 Lower Mount Street, Dublin, on June 12, Dr. A. J. Barnes, President, Street, Dublin, on June 12, Dr. A. J. Barnes, President, in the chair. The following members of the Council were also present: Mr. R. Blair (Vice-President), Mr. D. M. Watson (treasurer), Dr. J. A. Walsh, Dr. J. A. Mitchell, Messrs. J. Michie, James A. Doyle, R. F. McCartney, Michael Ryan, Fred Storey, John A. Bingham, S. Suffern, John Smith, J. E. Connor, J.P., F. J. Fitzpatrick, Wm. J. Hardy, G. A. McLean Lee, and D. J. Nugent. Mr. J. C. Culbert and Mr. V. E. Hanne, sept anologies for non-attendance. Hanna sent apologies for non-attendance.

LETTERS

The Registrar (Mr. A. T. Ferrall) submitted a letter from Mrs. B. White, returning thanks for condolence on the death of her husband, Mr. P. N. White, Ph.C.,

A communication from Mr. John Graham, solicitor, reported that in the Belfast Summons Court Mr. James Cotton, R.D., Newtownards Road, Belfast, had been fined £5, with 20s. costs, for keeping open shop for

compounding medical prescriptions.

Mr. H. O. Armstrong, principal and secretary of the Municipal Technical School, Lurgan, wrote asking for the recognition of a class in chemistry for chemists' assistants which is being held at the school.

The decision was postponed, pending the obtaining of

further particulars.

Mr. J. M. Moore, 18 Pound Street, Larne, who submitted a certificate from the Intermediate Education Board, was admitted to Preliminary registration.

The following notified changes of address: Mr. Wm. Curr, Ph.C., to 54 Trevelyan Terraee, Duncairn Gardens, Belfast; and Mr. James Leslie, Ph.C., to 85 Mayfield Road, Sanderstead, Surrey.

REGISTORED DRUGGIST COMMITTEE'S RECOMMENDATIONS

The Council resumed the consideration of the Registered Druggist Committee's recommendations which had

tered Druggist Committee's recommendations which had been adjourned from the previous meeting.

The Registrar also read a letter from Mr. Percy R. W. Shinner, Ph.C., 192 Cliftonville Road, Belfast, enclosing copies of the resolutions passed at a meeting of chemists in Belfast (see C. & D., June 16, p. 849).

Mr. Watson asked how many men were at that

Mr. HARDY said they might take it from him that the resolutions expressed fairly correctly the views of their licentiates throughout the six counties of Northern Ireland,

Mr. STOREY: How many were at the meeting?

Mr. HARDY: About thirty, I understand.

there myself.

Mr. WATSON: I think it would have been well if the number present and their signatures had been appended to the letter. It would have some effect on me. Other-

wise it has none.

Mr. Hardy said the first question in the Committee's recommendations was: "Is it your opinion that the R.D. examination should be discontinued?" The great bulk of the licentiates would answer "Yes." But then the recommendations went on with one or two schemes

which no sensible licentiate could agree to.

Mr. Watson: Neither of them is a scheme.

Mr. Hardy: That first question is merely a trap and a snaze, and should not be addressed to any licentiate.

Mr. Lee: You could answer "Yes," and leave the schemes out alterether.

schemes out altogether.

Mr. Nugent: It is very clever:
Mr. Hardy (reading from the recommendations): "If your answer is 'Yes,' please read over carefully the two sehemes outlined below, and sign your name opposite the scheme which you consider should be adopted." If that does not commit then I do not know what does.

Mr. STOREY said members were talking around a circle. They had expointed a Committee to consider this question. That was unanimously agreed to at the annual meeting. The Committee was composed of six pharmaceutical members of the Council and two druggists. members of the Council and two druggists. They went into all the pros and cons of the question. There was no doubt in the minds of the members of the Council at the annual meeting that it would be a good thing if the Registered Druggist examination could be discon-The Committee got certain terms of reference. They met a deputation from the Chemists' and Druggists' Society. They brought forward certain recommendations there two Council meetings ago. Members asked questions at that meeting. They went around in a circle all the time. The members of the Committee got all the time. The members of the Committee got no satisfactory information of what they wanted. They no satisfactory information of what they wanted. They wanted a scheme. The Committee met again; and taking into consideration all that had taken place at the Council meeting they tried to make out some kind of a scheme to submit to the Council and to all the licentiates, chemists and druggists, and registered druggists, leaving to them to say whether they would accept it or not. The members of the Committee were not all druggists. They were not going to sell the rights of the licentiates. They were just as keen on looking after the interests of the licentiates of the Pharmaceutical Society as anyone else. The Committee brought their recommendations before the Council at the last meeting. They only asked the Council to give them some suggestions.

Mr. Watson: The Committee was appointed to give

suggestions and to draw up a scheme.

AIr. STOREY said the suggestions were there. If the members of the Council had any better schemes or suggestions it was up to them to bring them forward.

Mr. WATSON said there was not much in the Committee's recommendations to put before the licentiates. Supposing they abolished the Druggist examination, what training would they insist upon being taken by these druggists? The recommendations stated: "Subject to presenting a certificate of practical experience in compounding." Did the Committee consider what that certificate was to be? Was it for one month in a school or three years in a pharmacy? That was a fundamental point, and it was not dealt with in either scheme.

Mr. Storey said the suggestion was that a man should show that he had at least one year's compounding under

a qualified pharmaceutical chemist.

Mr. Warson: In face of the fact that under our own certificate a man should have four years?

Dr. Walsh said he had met Mr. Allen, the second President of the Society, who mentioned that he was deeply interested on reading over the report of their last meeting with regard to this question, as he said that all the arguments they had gone through were exactly the same as had been gone through forty years ago by the Society with the Northern Druggists. They wildness had not come to any proper decision forty. evidently had not come to any proper decision forty years ago, or they would not be troubled with the subject now. He (Dr. Walsh) thought that the proposed plebiscite would be very much improved by having a third scheme which he suggested at the last meeting. providing that anybody coming forward for the licence of the Society should go through all the ordinary forms; in other words, that there should be no concessions. (Hear, hear.)

Mr. STOREX said he was glad Dr. Walsh had brought forward some kind of a sensible proposal, though he did not agree with it. That third proposal was one that every pharmaceutical chemist would vote for. How could a druggist in business fulfil all the requirements of the pharmaceutical curriculum? He would have to go to Dublin or Belfast to take out his classes. How could a man who, with his wife, was running the business, do that? That proposal was unpractical. He (Mr. Storey) wanted to stop the Druggist examination. They could not do it without the consent of the drug-They wanted the assistance of the druggists in gists. formulating a new Bill.

Mr. Warson: There would have to be two.
Dr. Walsh suggested that they should simply stop
the Druggist examination and let the druggists die out, as did the ehemists and druggists.

Mr. Storey: What about the present registered

druggists?

Dr. WALSH: They can remain registered druggists if they do not wish to comply. They would only have to

serve a further two years.

Mr. Storey: They would not agree to that.

The PRESIDENT: If we could get some scheme allowing them off the lectures, but otherwise attending the

examination just as any other entrant.

Mr. Stores: You want to give them a chance. There is no chance of these men ever taking the Pharmaceutical examination. They could not do it.

Mr. Michie: Let them stay in business until such time as they die. Or if they wish to come in for the Pharmaceutical Licence examination let them come in the same as any other licentiate of the Society.

The President: There is no concession in that,

Mr. Warson: That means the negation of Mr. Storey's

Mr. Lee said that under the scheme not only were the druggists to be allowed to carry on to the end of their days, but also to take apprentices. As he understood Mr. Storey's scheme; these apprentices were to be allowed to come in as pharmaceutical chemists to the end of their masters' days,

of their masters' days.

Mr. Storey said the druggist who did not become a pharmaceutical chemist, either by examination or by being allowed through in any way, was to remain a druggist until, he died. And his apprentices must be given the same facilities, without any artificial barriers, as the apprentices of pharmaceutical chemists.

Mr. Watson: What are artificial barriers?

Mr. Storey: You won't make him serve two years with a pharmaceutical chemist compulsorily.

The Drestrey The worst of thet is that it is almost

The President: The worst of that is that it is almost perpetual. It may go on for thirty or forty years.

Mr. Storey: That man must attend his regular

lectures.

Mr. Watson: He is alongside the man who has to

Mr. Warson: He is alongside the man who has to serve four years to a pharmaceutical chemist. And that would go on for twenty-five or thirty years at all events. Mr. Hardy said there were in the North of Ireland a number of assistants who had served their time to pharmaceutical chemists and who had not yet passed their Preliminary examination. Were these men to be penalised and three or four hundred druggists' assistants ellewed in?

Mr. WATSON said that when these proposals were in the earlier stages Mr. Storey said—and he was supported by one or two other members—that not 10 per cent. of

Mr. Stores : You would not get a big percentage.

It is not exactly that. We want to get their consent.

You must have the consent of the druggists to stop this examination. That is one point you seem to overlook.

Mr. Nugent: You must have the consent of the pharmacists before you allow in the druggists.

Mr. Storey: Yes, I know that.

Mr. Watson said if he saw that the twenty years' men would come in under a modified scheme he would

be much more prepared to support it.

Mr. Storey: You are dealing with men sixty-five years
of age. It would be a difficult thing to ask them to

go ir for an examination.

Mr. Nugent asked would Mr. Storey think of an age limit—that men over fifty-five years of age would not be asked to go in?

Mr. Storey: I am delighted to hear Mr. Nugent say

this. He is coming around.

Mr, NUGENT: I am not coming around. I believe that the pharmacists of Ireland are against this project. They don't want it. And I am going to propose now that we thank the Registered Druggist Committee for the care with which they have considered this matter, but that we are perfectly satisfied that the pharmacists of Ireland do not require it, and that the matter be put to an end.

Mr. FITZPATRICK: I second that. I consider the chemists of this country do not want the registered druggists' proposals.

Mr. HARDY said these schemes would not abolish the druggists; they would abolish the druggists' examination; and the druggists would remain for thirty years, and at the end of that time they would have another crop of unregistered men ready to come in.

The PRESIDENT: I think the question before the Council is whether these recommendations of the Registered Druggist Committee are to be put to the Licentiates of this Society as a referendum. Mr. Nugent's proposal would seem to be a direct negative.

Dr. Walsh: I would propose as an amendment that the third scheme be added to them.

Mr. LEE said he believed that if these recommendations of the Registered Druggist Committee were put in a different form acceptable to the pharmaceutical chemists, the registered druggists would not accept them. They should have this apprenticeship scheme thoroughly settled.

Mr. Watson asked, was it proposed that if they got a referendum approving of this scheme, the Council was committed to these proposals as they stood? Were they prepared for that? He certainly was not until they got more particulars. It seemed to him that the promoters of this scheme and those advocating it were very likely to bring about that split in the Society they all professed to want to avoid.

Mr. Storey said he believed that if this scheme did not go through they would see the Society split from end to end. He was very sorry to say that. He had set his face against a split. He was very anxious for an

agreed scheme.

The PRESIDENT: If the question is decided now, there is a possibility of its not being passed; and then it is done with sine die. But if you take it back to the Con-

mittee to try and get out a scheme with fuller details, there may be some chance of its passing.

Mr. Watson suggested that the Committee should take the scheme back again. He was, he said, hopeful that this matter could be solved, but this scheme would not solve it. He thought the details should be embodied

in the scheme before they were asked to look at it.

The President: It would never pass in its present form.

Mr. Storey: I see that now.

The President: If you agree to send it back to the Committee it will obviate Mr. Nugent's proposal.

It was agreed to send back the recommendations to the Committee.

EDUCATION COMMITTEE'S REPORT

The Council proceeded to consider the recommendations of the Education Committee.

The President said the report of the Education Committee had been postponed from the last Council meeting pending the receipt of replies from various educational bodies as to whether they would recognise the Society's certificate if they were to level up their Preliminary examination.

The REGISTRAR read a letter from Mr. Louis C. Purser, Registrar of Trinity College. Dublin, which stated :-

As soon as you have revised the course for your preliminary examination, if you will kindly send it to me. I shall bring it before the authorities here for consideration.

The REGISTRAR also read a letter from the National University of Ireland promising to place the Society's letter before the Senate at next meeting.

Mr. Alfred Miller, Secretary of the Conjoint Board

in Ireland of the Royal College of Physicians and the Royal College of Surgeons, wrote that

The Joint Board is not prepared to extend recognition to any examination in general education which is not directly recognised by the General Medical Council.

Mr. Watson said if they abolished their Preliminary examination they lost control. If they brought it up to the University standard that would debar some entering the business.

On the motion of Mr. Smith, seconded by Mr. Blair, it was decided to refer the report back to the Committee, with instructions to draw up a scheme for improving the Preliminary examination.

PHARMACY BOARD OF NEW SOUTH WALES

The Registrar read the following letter from Mr. W. Archer, Registrar of the Pharmacy Board of New South Wales :—

I have been instructed by this Board to inform you that in consequence of a regulation carried at the Board meeting held on June 13, 1922, this Board will not recognise any

Irish certificates of registration, until such time as your Society is prepared to enter into a reciprocal agreement with this Board. For this purpose I am enclosing herewith a duplicate agreement which has already been signed by the President of this Board, and would ask that the President of your Society sign same, returning both copies to this office, so that the seal of the Board may be attached thereto. I have to inform you that the Reciprocal Agreement enclosed is in the terms of the Agreement existing between this State and the Pharmaceutical Society of Great Britain. This Board has at present two pharmacists from Britain. This Board has at present two pharmacists from Ireland applying for registration in this State, but the Board has deferred the matter pending your decision.

Dr. Walsh proposed, in accordance with notice of motion :-

That immediate steps be taken to secure the necessary legislation for reciprocity with all the British Colonies.

He said that the letter from the Pharmacy Board of New South Wales expressed a great deal of what he was going to say. In existing circumstances, as two legislatures would have to deal with the question, it would probably take some time to do what was suggested. The Registrar of the New South Wales Board of Pharmacy had made an arrangement to meet him in London; and he presumed he might state that the Dublin Council were fully in favour of reciprocity, and that the only reason that they had not put it into effect was that they had no power to do so.

After some discussion a resolution in the following form, proposed by Dr. Walsh and seconded by Mr. Hardy, was unanimously adopted:—

That steps be taken at the earliest opportunity to secure the necessary legislation for reciprocity with the British Colonies and Dominions.

The Registrar was directed to reply to the communication from the Pharmacy Board of New South Wales, stating that the Society had been anxious for reciprocity all through, and calling their attention to the resolution now passed by the Council.

Trade-marks Applied for

- The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1923, p. 289.
 - (From "The Trade-marks Journal," June 6, 1923.)

- (From "The Trade-marks Journal," June 6, 1923.)

 "Nurac"; for goods (1). By Buckleton & Nourry, Ltd., 13 Rumford Street, Liverpool, 435,715.

 "Alvesco Red," on star-shaped device, for insecticides, etc. (2). By Murphy & Son, Ltd., The Cedars, Sheen Lane, Mortlake, London, S.W.14, 435,423. (Associated.)

 "Buccaneer"; for all goods (2). By Naamlooze Vennoots-chap Mijumaatschappij Curacao, 585 Keizersgracht, Amsterdam, 435,507.

 "RHINOLE"; for medicinal chemicals (3). By Cooper, Son & Co., Ltd., 80 Gloucester Road, South Kensington, London, S.W.7. 433,584.

 "Edona"; for pile pills (3). By R. Drew, 77 Dock Road, Victoria Docks, London, E.16, 434,693.

 "Phymatosan," with device of man and serpent; for all goods (3). By A. T. Leitc, Rue de Bomfin 1084, Rio de Janeiro, Brazil, South America. 434,841.

 "Ye Olde Pot Dick Rubbing Bottle," with picture of man and horse; for liquid embrocations (3). By W. B. Rushton, 113 Market Street, Farnworth, Laneashire.
- " Zoegen
- Rusmon,
 435,666.
 Zoegen "; for all goods (3). By John Bell Hills & Lucas,
 Ltd., 14 Tower Bridge Road, London, S.E.1. 435,734.
 Germosan "; for medicinal chemicals (3). By Genatosan,
 Ltd., 43 Regent Street, Derby Road, Loughborough.
- 436,525.
 "AGOLTHION"; for medicinal chemicals (3). By Pharmazeutische Industrie Aktien Gesellschaft, V. Wehrgasse 16, Vienna, Austria. 436,616.
 "SUMMIT"; for hypodermic syzinges, etc. (11). By Van Lier Brothers, 3 Eden Street, Hampstead Road, London, N. W. 1, 403,2442.
- N.W.1. 423,343.
 "CARTOUCHE BRAND," with Egyptian device for goods (47) and for perfumery, etc. (48). By D. & W. Gibbs, Ltd., High Street, Wapping, E.1. 435,143/144. (Associated.) "Joy"; for perfumed soap (48). By C. Thomas & Bros., Ltd., Broad Plain Soap Works, Bristol. 431,034.

- "POMPADOUR"; for toilet preparations (48). By White Band Manufacturing Co., Ltd., 121 Selsdon Road, South Croydon, Surrey. 432,756.

 DEVICE ON CIRCLE; for all goods (48). By L. Leichner, 31 Schützenstrasse, Berlin. 435,169.

 "PIPIT" and "PIP"; for perfumery, etc. (48). By G. W. Goodwin & Son, Ordsall Lane Soap Works, Manchester. 435, 251/252. (Associated)

- Goodwin & Son, Ordsall Lane Soap Works, Manchester. 435,251/252. (Associated.)

 "DINOL"; for dentifrices (43). By H. T. A. Eecker, 34/40
 Ludgate Hill, London, E.C.4. 435,337. (Associated.)

 "Selso"; for perfumery, etc. (48). By Lever Brothers, Ltd., Port Sunlight, Cheshire. 435,502.

 "Head-Clone"; for perfumery, etc. (48). By Penney & Co., Ltd., 19 Ludgate Hill, London, E.C.4. 435,608.
- - (From "The Trade-marks Journal," June 13, 1923.)
- "ACELTA"; for a bottle sealing preparation (1). By H. M. Guest and L. Shuell, 185 Princess Street, Manchester. 435,709.
- "SHERLEY'S NERVINE," etc., with device of four dogs' heads ("Sherley," "Sherley's" and "Nervine" disclaimed); "SHERLEY'S NERVINE," etc., with device of four dogs' heads ("Sherley," "Sherley's" and "Nervine" disclaimed); for a medicine for puppies and toy dogs (2). By A. F. Sher'ey & Co., Ltd., 46/43 Borough High Street, London, S.E.1. 433,755. (Associated.)

 "FLISSOF" on strip late'; for chemicals (2). By Hawker & Botwood, Ltd., The Grove, London Road, Grays, Essex. 423,510.

 "FUNGITE": for chemicals (2). By The Strawson Chemical Co., Ltd., 79 Queen Victoria Street, London, E.C.4. 437,769.

- "Fungite": for enemicals (2).

 Co., Ltd., 79 Queen Victoria Street, London, 437,c69.

 "Maskors" on square label device, including black cat; for medicinal pastilles (3) and for pastilles (42). By Hall Brothers (Whitefield), Ltd., Stanley Street, Whitefield, near Manchester. B431,285/287.

 "Demon-Skar," etc., with picture of demon on circle; for medicated waters (3). By Demonskar Health Waters, Oak Bank, Ulpha, Broughton-in-Furness. 435,284.

 "Ward's N R G Tablers," etc., on label device, with facsimile signature "A. Bailey Ward" ("Ward's" and "N.R.C." disclaimed); for digestive tablets (3). By A. B. Ward, "Brooklands," Norman Road, Sutton, Street A32,072. A. B. Ward, "Brooklands," Norman Road, Sutton, Surrey. 432,072. "PEACH BLOOM"; for pills (3). By Gertrude Heys and R. E. Burt, La Prairie Cottage, Millbrook, Jersey. 433,091.

- 433,091.

 "Bronchasmin"; for medicinal chemicals (3). By A. Q. Tucker & Co., Ltd., Onaway, Half Moon Lane, Herne Hill, London, S.E.24. 433,716.

 "Phrass Pills" on strip label; for herbal pills (3), By W. Hayes & Co., 7. Newstead Road, Liverpool. 433,726.

 "Biazme"; for medicine (3). By Physio'ogical Products Proprietary, 30-34 Elizabeth Street, Sydney, New South Wales, Australia. 433,751.
- Proprietary, 30-34 Education Sector, Wales, Australia, 433,731.

 "Senlax"; for medicinal chemicals (3). By Cooper, Son & Co., Ltd., 30 Gloucester Road, South Kensington, London, S.W.7. 434,100.

 "Clido"; for preparations for the treatment of corns and rheumatism (3). By J. Milner and P. S. Windwood, 95 Askew Road, Shepherd's Bush, London, W.12.
- 434,261.

 "BISMOSAL (ARNFIELD)" on label device, including snake ("Anfield" disclaimed); for medicine (3). By J. C. Arnfield & Sons, Ltd., Princes Street, Stockport. 433,830.(Associated.)

 "SHERPETCO" formed with large letters "P" in centre ("P" disclaimed); for medicinal chemicals (3) and for goods (47). By The Sherwood Petroleum Co., Inc., Bush Terminal Building No. 1, 203/233 Thirty-seventh Street. Brooklyn, New York, U.S.A. 435,215/217. (Associated.)
- (Associated.)
 "Penguin"; fo
- (Associated.)

 "PENGUIN": for all goods (3). By R. R. Wright, 46
 Lockett Road. Farnworth in Widnes, Lanes, 435,482.

 "DALFORD": for all goods (3). By J. H. Thomson, G. O. Andrew, T. Girdwood, and J. H. Tainish, 47 Slateford Road, Edinburgh. 435,633.

 "PURGOL": for medicinal chemicals (3). By Bishop's, Ltd., Oldham Road, Bardsley, Ashton-under-Lyne.
- 436,449.

- 436,449.

 "PEAFEX"; for medicinal chemicals (3). By T. Kerfoot & Co., Ltd., Oldham Road, Bardsley, Lanes. 436,503.

 "SPENWELL"; for corn salve (3). By H. V. Bartlam, 92 Mill Street, Liverpool. 436,549.

 "TARCOM"; for bath and foot powders and foot salve (3). By S. F. Bunyard. 34 Essex Street, Colchester. 436,574.

 "PANACAEMA"; for all goods (3). By W. T. Hindley, 11 St. John's Park, Upper Holloway, London, N.19. 436,778.

 "LIN-CAM"; for medicinal chemicals (3). By J. F. Wharton, 97 New Square, Chesterfield. 436,841.

 "PLEXOBEL"; for medicinal chemicals -(3). By A. Finlay, Ltd., Victoria Square, Belfast. 437,055.

The Rare Gases

The discovery of a new element is not merely a chemical achievement, it has a far wider significance, since it immediately raises the question of its rôle in the scheme of things. Those five rare gases—argon, neon, helium, krypton and xenon—discovered by Sir William Ramsay during the last years of the past century, offer many interesting problems, chief among which is their refusal to combine with other elements. "The Rare Gases of Thermal Springs, fire-damp and other Natural Gases," formed the subject of an address presented (in French) by Professor Charles Moureu, President of the Chemical Society of France, to Fellows of the Chemical Society at a meeting held in Burlington House, Piccadilly, London, W., on June 14, the President, Professor Moureu referred to the discovery of argon by Ramsay and Rayleigh, remarking that the rare gases represented a purely British branch of science. The existence of helium was first established in 1868, but it was Sir William Ramsay who first extracted this rare gas from cleveite, a mineral containing uranium. The discovery of these two gases was followed by the extraction from the air of three others, i.e., neon, krypton and xenon. All of these are simple bodies, possessing the following characteristics: (1) They are inert and form no compounds; (2) the molecule consists of a single atom; (3) all yield definite line spectra. An analysis of the atmosphere shows that one cubic metre contains:—

9.323 litres Argon ... 18.1 Neon c.c. , ... 5.4 Helium ... c.c. ... 0.049 c.c. Krypton *** Xenon 0.0059 c.c.

Professor Mouren has definitely established that the rare gases are present in the external atmosphere surrounding the earth, and also in the air found in the interior of the earth. He was induced to study these gases following the armouncement by Ramsay, in 1903, that radium gives rise to helium, and later that helium was also produced by actinium, the first example of genuine transmutations. Therefore it followed that helium must be the product of disintegration of the q-rays emitted by radium. Professor Mouren described, with the aid of slides, the method adopted for separating the spontaneous gases of mineral springs, based on a continuous circulation of the gas over metallic calcium, copper oxide, phosphorus pentoxide and calcium sodate, whereby only the five rare gases remain, adopting Sir James Dewar's technique of fixation and subsequent separation by charcoal and liquid air, helium and neon not being thereby absorbed; whereas the other three are absorbed and can be released separately by gradually raising the temperature, a species of fractionated distillation of the mixture of gases. The gases given off by 108 different mineral springs were studied, and the are gases were found, without exception, to be present in all. The observation was made that oxygen is always present when the mixture of natural gases contains a high percentage of carbon dioxide; nitrogen is always present, in amounts varying between 98.55 per-cent. (water of Cauterets) to 0.16 per cent. (Vichy, source Chomel). The highest content of argon, with traces of krypton and xenon, was found in the gases of Plombières-1.64 per cent.—while no less than 10.16 per cent. of helium, with traces of neon, were demonstrable in that collected at the Lithium spring of Santenay. Dealing with these results critically, the lecturer drew attention to the variations in the proportions of the gases given off by mineral springs, contrasting this with the constant ratio in the composition of the atmosphere; further oxygen is in the majority of cases totally absent, or present only in traces, not exceeding 0.53 per cent. (Bourbon-Lancy). On the other hand, compared with the atmosphere, spring gases have a very high content of helium, and in this connection Professor Moureu expressed the view that this helium was of ancient origin, was, in fact, fossile helium, and stressed the point that there is no relationship between the helium content and the radio-activity of natural mineral waters, in other words, the helium is not entirely the product of radium disintegration. The ratio of krypton to argon in spring gases is very constant, being only slightly higher than that existing in the atmosphere. To explain this relationship we must go back to the early days of the solar system; in the evolution of this planet the elements successively entered into combinations, and only the five rare gases under discussion retained their inviolability, remaining free; nitrogen is just on the border line, since it enters into combinations with other elements. The ratio of xenon to krypton is also fairly constant; but the amounts of helium present in the gases emitted by springs stand in no fixed ratio to any other of the gases present; this he ascribes to the fact that helium is being constantly produced by radio-disintegration. Further, the rare gases are always accompanied by nitrogen in certain, closely approximating, proportions. The gases present in the air of ten different mines were also investigated, with the result that in none of these was it possible to demonstrate radium emanations. Oxygen was always absent; carbon dioxide was present in small amounts, and also nitrogen; the rare gases were found in every instance, in varying proportions. Combustible gases formed the chief constituents of firedamp. The gases emifted by some petroleum wells and those found in five Alsatian potash mines were found also to contain small amounts of helium and argon. In conclusion, Professor Moureu advanced the view that the rare gases found in the atmosphere originated from the interior of our planet, being liberated by earthquakes and finding their way through fissures into the waters of springs, and thence into the atmosphere. Helium, however, occupies a different position from that of the other rare gases, owing to the unequal distribution of radio-active substances in the successive layers of the earth's crust. Finally, he made a brief reference to the uses of helium, for filling airships, and for obtaining low temperatures.

Bankruptcy Reports

Re Clement Harrison, late of 9 Coleherne Terrace, Earl's Court, London, S.W., chemist.—The public examination of this debtor was held on June 15 at the London Bankruptcy Court, the accounts showing liabilities of £1.624, against assets valued at £243. Replying to the Official Receiver, the debtor recapitulated the circumstances of his business ventures (C. & D. April 14, p. 506). He attributed his insolvency to lack of capital, interest on borrowed money, and ill health. The examination was concluded.

Re Robert Henry Myer (trading as the Ross Supply Co.), manufacturing perfumer, 186 Wandsworth Road, London, S.W.—The creditors under this failure met on June 19 at the London Bankruptcy Court. The Official Receiver reported that the debtor had stated that, on being demobilised from the Army in the beginning of 1919, he obtained employment as a chemists' assistant. In the following May he commenced business as a factor of brushes and combs, and shortly afterwards he was joined by a partner. That business came to an end eighteen months later, when a composition of 5s. in the 2 was paid on liabilities of £1,000 under a deed of assignment. The debtor was next joined by another partner, who introduced £100 capital, and they traded as manufacturers of perfumes. Shortly afterwards the partner was bought out by a third party, who provided £50, but he withdrew on January 1 last, and since then the debtor had traded alone. The trading was not successful, and, being pressed, he petitioned the court with liabilities £400, against assets valued at £130. The failure was attributed to lack of capital and general slackness of trade. Mr. D. Hart was elected trustee.

Canadian Bentonite.—One of the purest deposits of bentonite in the world has been found at Rosedale. Alberta. Canada, according to Prof. Pitcher, professor of mining at the University of Alberta. The deposit is estimated to contain millions of tons. Bentonite is a hard asphaltic substance which swells greatly when exposed to water. It is used in soap making, electrical insulating material, and many other industrial purposes.

Westminster Wisdom

By the " C. and D." Parliamentary Representative

MORPHINE AND HEROIN FACTORIES

In reply to a question on June 13, Mr. Bridgeman said that the number of factories in Great Britain licensed at the present time for the manufacture of morphine and heroin is two. The amount of morphine made in 1922 was 315,342 oz., of which, however, 173,010 was converted into codeine or heroin, leaving a net total of 142,332 oz. The amount exported was 115,465 oz. The amount of heroin made in 1922 was 31,673 oz., and the amount exported 25,911 oz.

MARKING HONEY

During the Committee stage of the Merchandise Marks Bill, which seeks to amend the Merchandise Marks Acts, 1887 to 1911, in respect of imported agricultural produce, Lieut. Colonel Mason moved an amendment to include honey in the provision dealing with the branding of imported produce. Mr. Pretyman, who is in charge of the Bill, said that he had received representations from all parts of the country in favour of this amendment, which he accepted. A great deal of inferior honey was imported into this country. It could easily be detected by the expert, but not by the ordinary consumer. Lieut. Commander Kenworthy, in opposing the amendment, pointed out that a good deal of the honey imported into this country was not used as food, but for manufacturing purposes. The amendment was carried by 22 votes to 7.

PREVENTING VENEREAL DISEASE

Mr. Peto asked the Home Secretary, on June 13, whether his attention has been called to the report of the Committee of Inquiry on Venereal Disease; and whether he intends to introduce legislation during the present session to give effect to their recommendation to permit properly qualified chemists to sell appropriate disinfectants.

Mr. Chamberlain replied that the report of this Committee is under consideration, and he was not yet in a position to announce what action will be taken upon their recommendations. As regards the second part of the question, he was advised that there is nothing in the existing law to prevent chemists selling disinfectants for purposes of prevention of any venereal disease so long as they are not sold accompanied by any written or printed recommendations.

MEDICINE-STAMP DUTY

When Clause 7 of the Finance Bill was reached during the Committee stage on June 12 Mr. Neil Maclean opposed the clause which levies the increased medicine duties imposed in 1915. He desired to get the medicine duty entirely repealed, or, at any rate, to get that portion of the increase taken off which was put on as a result of the war, so that the tax may stand at what it was before the imposition of the additional 1½d. The amount realised by the tax for Great Britain in 1914, before the imposition of the additional duty, was £360,377. In 1921-22 the net receipts from the duty were £1.328,448. He did not know what the figures are for the year 1922-23, but he understood that they are about the same. Evidently there has been no greater consumption of this class of medicine during the year, or the amount of revenue received would have been more; but, since this is an article which is largely bought by people who imagine themselves to be unwell, and who are sometimes deluded by the fanciful; alluring advertisements of those firms who advertised these medicines, he did not think the Government, if it reduced the tax by the amount imposed during the war, would suffer a very great loss of revenue. The House and the country are entitled to a statement from the Government with regard to the future of the tax, and whether they do not consider it is time the medicine duty should be brought back to the pre-war figure.

Mr. T. Williams said obviously a tax upon medicines must in the very nature of things be a tax upon the health of the people. It is a limitation upon curative treatment that ought not to exist, and thousands of lives must be endangered if a number of medicines are pre-

vented from entering the country because of taxation or other restrictions which may be imposed. Hospitals need a constant supply of certain kinds of medicine, and if they are deprived of the opportunity of using the medicines they know to be necessary for the health of the patients the patients are bound to suffer. There is no excuse for preventing us from enjoying the benefits of foreign vegetable substances embodied in medicine of any description. We ought not to be compelled as a nation to suffer because of an obsession on the part of a few politicians, even though they may desire to enhance the sale of what we see advertised every morning, and though they may have enjoyed the benefit of the Kruschen feeling.

on the part of a few politicians, even though they may desire to enhance the sale of what we see advertised every morning, and though they may have enjoyed the benefit of the Kruschen feeling.

Sir W. Joynson-Hicks, for the Government, said that Mr. Williams had misunderstood this clause. It has nothing to do with medicines, hospitals, or doctors' prescriptions. It is not a tax on medicines imported into this country, or medicines used in hospitals or prescribed by doctors, but on what everybody knows as patent medicines, corn cures, and things of that kind. It is an excise duty on all these patent cures, some of them doubtless very useful and some perhaps the other way; but there is perhaps no tax in the whole Budget which he thought as useful and as desirable. We have heard a great deal about the food of the people, and so on, but if there is one tax which can be fully justified it is a tax on all luxuries, whoever uses them.

Mr. N. Maclean: If the right hon, gentleman is going to support these taxes on the ground that they are taxes on luxuries, are we to take it that he is in favour of a luxury tax?

Sir W. Joynson-Hicks replied that he is in favour of this tax, at all events, and the hon. gentleman can make as much or as little as he likes out of that. Before the war this tax produced from £300,000 to £400,000 a year. The tax was doubled, and it now produces £1,300,000 a year, so that doubling the tax has not in any way reduced the consumption of patent medicines. It may be, as the hon. member suggests, that different forms of medicine are now taken, so that instead of corn cures medicines are now taken internally. He did not dispute that, but when the total consumption of these patent medicines has increased in spite of the doubling of the tax, then that tax cannot be said in

any sense to be a protective duty.

Mr. Short: The Committee is indebted to the right hon. gentleman for his clear, precise definition of the meaning of this clause. He tells us that this is a tax on patent medicines manufactured and sold in this country. But we cannot overlook the fact that a great change has taken place in the attitude of the population with regard to those matters. He is inclined to think this is the age of tabloids. He never sat down to a meal without seeing people taking tabloids and patent medicines of all kinds, and there is no doubt, as the figures quoted by the right hon. gentleman indicate, it is a growing practice. The right hon, gentleman said this question does not affect the hospitale. He thought it could be shown that as the result of a protracted period of unemployment and distress, the poor quality and quantity of the food obtainable, and the consequently low standard of living prevailing among working people and their families, their powers of resistance have been invaded. They are more likely to suffer from disease and the means whereby they can get proper and adequate treatment have been lessened. We all know, as was indicated by an eminent London coroner recently that our panel system is not by any means the best conceivable; indeed, in some quarters it is regarded as a failure. At the one end of the scale, the poorer class of people through their distress, and at the other end of the scale, the richer class because of their folly, are being compelled to resort to patent medicines. He did not speak for the well-to-do. He was thinking largely of the poorer class, and as the duty on patent medicines has increased the cost, it has to that extent and in that way interfered with and jeopardised the

The Committee divided on the question "that the clause stand part of the Bill," and it was carried by a majority of 112.

genera-

owing

comparison

Pharmaceutical Botany

XII. Vascular Cryptogams-Pteridophyta

THE above heading illustrates how a term in natural science may come to mean precisely the opposite to its original intention and yet be retained owing to custom and convenience. Flowerless plants were divided into lower Cryptogams (Bryophyta, Thallophyta) and Vascular Cryptogams (Pteridophyta or fern family), the latter having specialised water-conducting tissues (vasa). The title Cryptogam (cryptos, hidden, and gamos, marriage) was used to contrast the evident "sexuality" of the flowering plants (Phanerogamia, phaneros=evident) with their conspicuous "male" stamens and "female" ovaries. When microscopic investigation made it possible to observe the real sexual organs it was found that stamens and carpels are sporangia or spore-bearing

organs. A gametophyte tion is concealed in the spores pro-duced therefrom, and reduction in size organs of the flowering plants are doubly hidden. It is only by careful with the more perfect sexual apparatus of the Cryptogams that their omologies can be traced. Moreover, the sexual organs of the Cryptogams are borne on a sexual plant (gametophyte) leading an exist ence more independent than the (alternating) sporophyte generation. In the Bryophyta the sporophyte remains dependent upon the gametophyte throughout its life. In the Pteridophyta

becomes emanci-pated therefrom at an early stage Fig. 33.-Aspidium Filix-mas. Apical portion of male fern plant, with and develops into single expanded leaf and leaves in bud a typical land showing circinate folding of leaves in bud plant with root, (vernation, from ver = spring). Also leaflet (pinna) showing collection of sporangia stem and leaves. (sori) on under side of leaf.

Adaptation to

land has resulted in development of "vascular" tissue thence the term Vascular Cryptogams) for conduction of water and to support an ever-increasing burden of expanded surface as the plant grows in size. A difficulty in the study of evolution is that often only the "fait accompli" is all that is available. The gap between the Bryophyta and the Pteridophyta is so wide that it must be bridged by conjecture. The great difference between the two properties in that the plant beaving the name is the groups lies in that the plant bearing the name is the gametophyte generation in the Bryophyta and the sporophyte generation in the Pteridophyta. The sporophyte generation in the simplest liverwort (Riccia) is a spherical ball (or capsule) containing spores, the wall of the capsule being sporogenous tissue which has become sterile to protect the remaining reproductive cells. By further sterilisation and delay in spore reproduction one can see the origins of the stalk, wall, column and lid of the complex capsule of Funaria. Nevertheless, it is easy to see that the size of the moss sporophyte is obviously limited by being dependent upon the parent gametophyte for much of its nutriment. The first stage in the evolution of the Vascular Cryptogams was undoubtedly the removal of this last limitation by lateral development of a downward extension of the stalk (or stem), which became a true root and ensured a supply of water independent of the parent gametophyte. The appearance of a root ensancipated the sporophyte and permitted even further extensive vegetative growth before the production of spores in sporangia of one form or another.

sporangia of one form or another.

The Pteridophyta takes its name from the common bracken (Pteris), and its living representatives are a comparatively small remnant of fern types which were dominant in the Coal Age. The male fern, Aspidium (or Nephrodium) Filix-mas (Fig. 33) is a typical member of the class (Filices) to which it belongs. It is one of our commonest indigenous ferns, being fairly abundant in shady places. The plant consists of an almost horizontal underground stem (rhizome) closely beset with the remains of leaf stalks from the pointed base to the the remains of leaf stalks from the pointed base to the crown, where the leaves (also called fronds) are given off. In strong plants the circular tutt of fronds may attain 3 ft. in height. At the apex of the rhizome is a bud with leaves folded in a characteristic crozier-like (circinate) manner. Such buds take three or four years to develop before they unfold. Both the rhizome and leaf bases are clothed with membraneous scales. In July

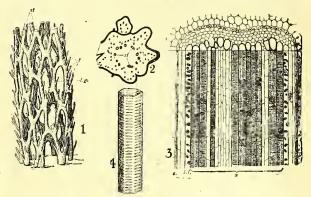


Fig. 34.—Aspidium Filix-mas.

1. Stelar system of male fern, isolated from ground tissue; t, small steles entering leaf; l.g., leaf gap. 2. Transverse section of male fern (diagrammatic); st, principal steles, also showing smaller steles in leaf basis and at various depths in traversing central tissue to join main steles. 3. Transverse and longitudi at section of a stele; e, endodermis; s.t., sieve tube, x, xylem. 4. Part of scalariform trached, enlarged, showing characteristic arrangement of unthickened portions of wall (or pits).

to September the under surface of the leaves will be found to bear clusters (sori) of spore-containing stalked-capsules (sporangia) covered by kidney-shaped coverings (iudusia). The botanical name of the plant is from aspis, a shield, owing to the distinctive shape of this indusium. A section of the rhizome shows a series of vascular strands or steles embedded in soft ground vascular strands or steles embedded in soft ground tissue (or parenchyma). Male-fern is polystelic (polymany), the arrangement of main steles and subsidiary steles being evident in the vascular skeleton shown separated from the softer "ground" tissue (Fig. 34 (1)). The formation of woody tissue is due to thickening of the walls of the cells which eventually form these water-conducting strands. The living contents are used up in the process and the substance of the wall becomes con-verted into lignin except the original cellulose partition (known as the middle lamella), of which portions remain uncovered by thickenings to form pits arranged in a definite manner (Fig. 34 (4)). Contrast with this the living conducting tissue of the phloem with its "sieve plates" penetrated by fine protoplasmic fibrils and thus possessing protoplasmic continuity. The sieve tubes are concerned in the translocation, conversion and storage of plastic food substances. The details of structure in Fig. 34 (3) should be carefully inspected with a view to comparison later on with higher plants.

Recent Patents

Abstracts of specifications of recently-granted patents for inventions. The complete specification (1s. each including postage) of British patents can be obtained from the Patent Office, 25 Southampton Buildings, London, W.C.2, on quoting the name of the patentee and the number of the patent.

Water Softener.—Peat is prepared for use as a water softener by treating it with caustic soda or carbonate or bicarbonate of soda and drying the resultant mass, with or without previous washing. (G. G. Hepburn. 197,851.)

Alkali Thiosulphate.—A solution containing alkali sulphite and bisulphite is treated with sulphuretted hydrogen liberated from barium sulphide by the addition of acid. (Rhenania verein Chemischer Fabriken A. G. Zweigniederlassung Mannheim. 197,898.)

Food Products from Yeast.—Complete debittering of crude yeast is obtained by the peptonisation of yeast without a prior chemical debittering treatment by the addition of colloid adsorbing agents: (J. M. Guthrie and W. McEwan & Co., Ltd. 197,868.)

Artificial Manures.—Manures consisting of a mixture of carbon or a carbonised organic substance in a finely sub-divided or a colloidal state, with a catalyst or an oxidiser or with both, the mixture being such that it will give off carbonic acid. (Dr. J. Gradl. 184,800.)

Sulphate of Ammonia.—Ordinary sulphate of ammonia or "salt" is treated in a closed vessel with gas containing ammonia obtained from the gas-producing plant, using part of the ammonia in the gas flowing to the usual separators, to obtain a neutral sulphate of ammonia. (Pease & Partners, Ltd. 197,724.)

Photographic Developing Tank.—The tank is constructed so that the film axis is arranged horizontally and the film unrolled and fed downwards by a vertically descending plunger. A spool holder is provided which permits the film to rotate for unwinding and holds the free end of the film backing looped across the adjacent end of the tank in position to be engaged by the means for unwinding the film. Preferably the spool holder is in the form of a removable U-shaped plate having an extensible side to accommodate spools of different sizes. The other side is formed to grip the free end of the film backing. An agitator may be provided to remove air bubbles from the film. (A. Waterworth and G. F. Framjee. 187,228.)

Flash-light Photography.—The combination with a camera shutter, adapted to be operated pneumatically, of a flash-light apparatus comprising a fixed tray, which is carried by a support and is adapted to hold a lighted match or taper, and a hinged tray or flap, which is adapted to receive a charge of magnesium powder and to be swung on its hinge to project the said powder on to the lighted match or taper, and a pneumatically actuating means common to tray and shutter whereby the latter is opened simultaneously with the production of the flare. A further feature of the invention consists in the provision of a complete outfit for enabling flash-light photographs to be taken with an ordinary camera. (E. Chasseraux. 195,412.)

Eutyl Chlerides.—The continuous manufacture of butyl chlorides is obtained by the action of gaseous hydrogen chloride on normal butyl alcohol by passing hydrogen chloride through the butyl alcohol, heated to a suitable temperature and containing an appropriate catalyst, distilling butyl chlorides and water as they are produced, and adding continuously butyl alcohol, the catalyst being one having a purely dehydrating action or one which forms a temporary combination or addition product with hydrochloric acid. The suitable catalysts are of three sorts: (1) Having a purely dehydrating action, such as sodium sulphate; (2) adapted to form combinations with hydrochloric acid, such as cuprous chloride; (3) belonging to both foregoing categories, such as zinc chloride (Société Ricard Allenet & Cie. 191,002.)

UNITED STATES

Aldekyde-Ammonia.—A process comprising the bringing together acetaldehyde vapour and gaseous ammonia. (H. W. Matheson. U.S.P. 1,450,983.)

Solution of Dichloramin-T.—Dichloramin-T is dissolved in monochlor-benzene, and when required for use the solution is diluted with chlorcosane. (U.S.P. 1,451,857.)

Borax and Boric Acid.—A process for the manufacture of borax characterised by treating sodium pentaborate by adding thereto a sodium salt and ammonia. (A. Kelly. U.S.P. 1,450,975.)

Soap.—A saponaceous antiseptic and insecticidal composition comprising soap, eighty parts; a fixed alkali benzoate, ten parts; and tar, ten parts. (R. Macpherson and W. E. Heys. U.S.P. 1,451,670.)

Aliphatic Aldehydes.—A condensation of acetaldehyde is prepared by adding to the aldehyde approximately 0.5 per cent. by weight of caustic alkali in aqueous solution. (H. W. Matheson. U.S.P. 1,450,984.)

Synthetic Resins.—Synthetic resins may be prepared by condensing a phenol and formaldehyde with a polymerised vinyl compound in the presence of an accelerator consisting of an organic oxide. (H. Plauson. U.S.P. 1,451,843.)

Anhydrous Magnesium Chloride.—A method of making anhydrous magnesium chloride which consists in causing a reaction between magnesium oxide and hydrochloric-acid gas. (P. Cottringer and W. R. Collins. U.S.P. 1,450,912.)

Dehydrating Alcoholic Liquids.—A process of dehydrating isopropyl alcohol consisting in admixing it with caustic alkali and drawing off the aqueous solution of caustic alkali when it has separated. (M. D. Mann. U.S.P. 1,452,206.)

One of a series of nitro derivatives of the benzoic acid esters of tri-halo-gentertiary-butyl-alcohol, having the following characteristics:—Insolubility in water; soluble in organic solvents, crystalline form and stability under ordinary conditions. (T. B. Aldrich. U.S.P. 1,451,357.)

Tooth Brush and Paste Holder.—The combination of a brush block, a holder having a seat to receive the brush block and formed with a longitudinal channel opening through the seat at one end. Means is provided for forcing the dental paste into the opposite end of the channel. (F. H. Clum. U.S.P. 1,451,941.)

Mercurial Composition.—A preparation comprising pure metallic mercury and a substantially soluble carbohydrate medium capable of holding the mercury in a dispersed condition and capable on addition of water of forming a liquid assimilable by, and isotonic with, normal blood. (H. M. Spencer. U.S.P. 1,451,850.)

Comb.—A comb comprising a hollow back having a longitudinal slit, teeth extending from the back and provided with ducts opening at one end into the back and at their other ends through the outer ends of the teeth, the aforesaid slit being in line with the first-mentioned ends of the ducts, and a reservoir removably mounted in the comb back and discharging into the ducts. (H. T. Holland. U.S.P. 1,451,260.)

Phthalimids.—A process for producing a phthalimid comprising the passing of a gaseous mixture consisting of naphthalene, oxygen, and a substance containing the group NH₂ into contact with a catalyst capable of accelerating the oxidation of the naphthalene to phthalic anhydride, while maintaining the catalyst at a temperature between 200° and 650° C. (H. D. Gibbs. U.S.P. 1,450,678.)

Purification of Methyl Alcohol.—A process for the elimination of sulphurous impurities in methyl alcohol consisting in treating a mixture of substantially equal parts of the crude methyl alcohol and water with a chlorinating agent in the proportion of seven to eight parts by weight of active chlorine to one part by weight of sulphur present at ordinary temperatures, permitting the reaction to proceed for about twelve hours and rectifying the reaction product. (W. Elsner. U.S.P. 1,450,147.)

Personalities

Mr. C. W. Bonny has been appointed as representative of Bourjois & Cie, Ltd., for the territory South of the Thames.

MR. McCarthy Stephenson, representative of Warwick Bros., Ltd., London, was the guest at the weekly meeting of the Southport Rotary Club on June 13.

COLONEL W. F. WYLEY, Provincial Grand Master of Warwickshire Masons, recently laid, with Masonic ceremonial, the foundation stone of the Church Institute, Maney, Sutton Coldfield.

Mr. T. W. Tullett, who has been for some years a representative of The British Drug Houses, Ltd., has resigned his position as from July 14, and is taking up his residence in South Africa.

Mr. Artiur A. White, chemist and druggist, Naírobi, Kenya Colony, has been installed Worshipful Master of the Lodge Harmony No. 3084 E.C., this being the second year in succession. Following the ceremony a banquet was held at the New Stanley Hotel, Nairobi.

At the meeting of the Hertford Chapter of Royal Arch Masons, held at the Shire Hall, Hertford, on June 18, Mr. W. Maskew, Ph.C., was installed in the H. Chair as Second Principal, and also acted as installing master during the ceremony of inducting his successor into office in the J. Chair.

Mr. E. R. Brickell, chemist and druggist (Brickell & Jones, chemists, Brondesbury, London, N.W.), while motoring near Cambridge, recently, was involved in a fatal accident. From inquest evidence it appeared that Mr. Brickell, after slowing down his car, proceeded over the cross roads at Pampisford, when he was struck by a car driven by Dr. G. Hannon, Beeston, Notts, whose death was caused by a fracture of the skull. A verdict of "Accidental death" was returned. Mr. Brickell and his companion fortunately escaped uninjured.

MR. DAVID DICKSON, chemist and optician, 716 Ashton New Road, Clayton, the newly elected President of the

Photo] [Cleworth Mr. D. Dickson

Manchester Pharmaceuti-cal Association, is, so far as is known, the first Manchester-born man to occupy this honourable position. Mr. Dickson commenced his career in pharmacy by serving a three years apprentice-ship to Mr. Thomas R. Jeans, Broad Street, Pendleton, afterwards going to his employer's brother, Mr. E. Jeans, Moss Side, as assistant. as assistant. After a course of study at the Northern College Pharmacy under Clayton's tuition he qualified in 1892. Mr. Dickson then gained further experience as manager to

Barnaby & Cowans, chemists, Star Hill, Rochester. Returning to Manchester, he was secured by another brother of his first master—Mr. Alfred Jeans, Oxford Road. In 1897 he commenced business on his own account in Clayton, where he now owns two prosperous pharmacies. For the past seven years Mr. Dickson has been a churchwarden of St. Andrew's Church, Droylsden, and treasurer of the Clayton branch of the Nurses' Home. He is also a prominent Freemason, being Senior Deacon of the City Lodge, 3999, of which he is a founder; and last year he was elected chairman of the Manchester Pharmaceutical Masonic Association, of which he was also a founder. For many years he has been an active worker in pharmaceutical circles, being a member of the Insurance Committee and of the council of the Manchester Pharmaceutical Association, he was elected Vice-President of the Association last year.

Miss Janet H. M. Sutherland, daughter of Mr. D. G. Sutherland, M.B., Ealing, London, W., and niece of the late Mr. John W. Sutherland, Ph.C. (Frazer & Green, chemists, Glasgow), has been awarded the licence in dental surgery of the Royal College of Surgeons. Miss Sutherland recently celebrated her twenty-first birthday.

The Albert Medal of the Royal Society of Arts has been awarded to Major-General Sir David Bruce, F.R.S., D.Sc., and Colonel Sir Ronald Ross, K.C.M.G., F.R.S., D.Sc., M.D., in recognition of services rendered to the economic development of the world by their achievements in biological research and the study of tropical diseases.

Mr. T. J. Stanley Jukes, representative of Francis Newbery & Sons, Ltd., druggists' sundriesmen, London, E.C.1, was involved in a nasty accident in Coventry on June 12. Mr. Jukes's car was drawn up outside a pharmacy in Spon Street when it was crashed into by a lorry of which the driver had lost control, and it had to be sent away for repairs.

Births

Notices for insertion in this column must be properly authenticated.

Ashworth.—At 1006 Chester Road, Stretford, Manchester, on June 16, the wife of F. Ashworth, chemist and druggist, 167 Princess Road, Moss Side, of a son.

DUERDIN.—At 36 Albert Road, Widnes, on June 17, the wife of John Dick Duerdin, chemist and druggist, of a son

Mellor.—At the Redlands, Uttoxeter, on June 16, the wife of Ernest M. Mellor, D.B.O.A., chemist and druggist, of a daughter.

WEATHERILL.—At 79 Talbot Road, Bournemouth, on June 14, the wife of R. J. H. Weatherill, pharmacist, 73 Springbank Road, Lewisham, London, S.E.13, of a daughter.

Marriages

STUTTARD—THORP.—At the Parish Church, Bury, on June 9, Charles Thomas Stuttard, chemist and druggist, 16 Parkhills Road, only son of Mr. T. Studdard, Clayton, Manchester, to Ida, younger daughter of Mr. J. Thorp, Ash View, Wellington Road.

SUTHERLAND—FORBES.—At Dundee, on June 6. Ian Campbell Sutherland, chemist and druggist, to Agnes, younger daughter of Mr. Alexander Forbes, Lonach Park Road.

Deaths

Bowen.—At Prospect House, Hendy, Pontardulais, recently, Mr. Ebenezer Bowen, chemist and druggist, aged seventy-four. Mr. Bowen had carried on business in the district for nearly fifty years, and was highly respected. He is survived by four sons and four daughters.

Fish.—At "Hendon," Blackburn, on June 16, Mr. Thomas D. Fish, for many years secretary to William Blythe & Co., Ltd., manufacturing chemists, Church. Accrington.

Pearson.—At Formby, on May 31, Mr. William Pearson, Ph.C., aged sixty-two.

Willoughby.—Recently. Mr R. G. Willoughby, Chinley, for more than thirty-eight years on the representative staff of Goodall, Backhouse & Co., manufacturing chemists, Leeds. Mr. Willoughby, whose death occurred suddenly, was a man of cheery and engaging personality, and his loss will long be felt in Northera trade circles.

Trade Notes

Rose's DAY CREAM is a high-class vanishing cream made by A. V. Rose & Son, 53 Kirkstall Road, Leeds.

Warehouse closed.—The wavehouse of Bourjois & Cie, Ltd., 66 Carter Lane, E.C.4, will be closed on June 30 for the staff outing.

SAFETY RAZORS.-Mr. L. Frankenberg, 15 Stoney Lane, London, E.1, has issued a bargain list of safety razors, for which he invites applications.

Annual outing.—Henry C. Quelch & Co., 4 and 5 Ludgate Square, London, E.C.4, inform us that their premises will be closed on June 30, the occasion of the annual

RONOLEKE HOT-WATER BOTTLES .- Those who are ordering Lot-water bottles for the winter season should note the claims of the Ronoleke hot-water bottles as distinctive and profitable.

The Owtazin Co., 50-51 Fore Street, London, E.C.2, have been appointed sole agents for A. C. Tharalsden, Christiania, makers of hair, loofah and straw socks. The wholesale trade can obtain samples on application.

Window dressing competition.—A & F. Pears, Ltd., 71-75 New Oxford Street, London, W.C.I, give in their advertisement the complete list of prize-winners in the window dressing competition referred to in this column lest week.

"BRITGLA" is the registered trade mark of the British Lampblown Scientific Glassware Manufacturers' Association, Ltd., and when found on medical glassware and cientific instruments made by members of the association, ensures that the articles are of British make.

CLOSED FOR STOCK-TAKING.—Allen & Hanburys, Ltd. manufacturing chemists, announce that their Bethnal Green offices and works will be closed for stock-taking on June 28, 29 and 30. During this period small urgent orders can be executed at the Vere Street branch, London, W.

NEW LIST.—Evans Sons Lescher & Webb, Ltd., Liverpool, have issued a new list of pharmaceutical specialities. organo-therapeutic products, and bacteriological prepara-tions made at their laboratories. It is an interesting list, and includes aqueous tinctures, folded powders, concen-trated mixtures, and tablet triturates.

LENORA VANISHING CREAM advertised in this issue has been recently introduced to the trade by the Parkside Manufacturing Co., 53 Paris Garden, Blackfriars, London, S.E. A dainty 2 oz. size intended for a lady's handbag is issued in aluminium screw cap box. The cream is suggested for summer use, and it serves the dual purpose of a toilet and an anti-midge preparation, the lavender oil, which is the perfume used, being effective in the latter connection. Retailing at 4½d., the cost is 30s. per gross for this size, and 1 oz. and 2 oz. packings are also issued. Samples may be obtained on request. Show bills are supplied with each order.

Kelly's World's Directory.—The thirty-seventh annual edition of Kelly's Directory of the Merchants, Manufacturers and Shippers of the World (64s, post free) has just been issued in two volumes by Kelly's Directories, Ltd., 186 Strand, London, W.C.2. The work comprises some five thousand pages, and gives information as to 20,000 foreign and colonial cities and towns, under which over 1,500,000 trade descriptions are given. Many alterations have been incorporated in this given. Many alterations have been incorporated in this edition, in order that the work may be brought up to date and maintain its accuracy. The general plan of the directory is well known. In the present edition an alteration has been made in the section dealing with Canada. In previous editions, the provinces were arranged alphabetically with a list of towns for each province. To facilitate reference the towns and cities in Canada are now arranged in one alphabetical list throughout the Dominion, indication being given in each case of the province. A practical example of how to case of the province. A practical example of how to use the directory is given in four languages just after the title-page.

Business Changes

MR. R. Bushby, chemist and druggist, has opened a business at St. Mary Street, Chepstow

Mr. F. Robbins, chemist and druggist, has acquired the business at 49 Taff Street, Pontypridd, until lately carried on by Mr. N. T. Lewis, chemist and druggist.

THE HARPIC MANUFACTURING Co., makers of Harpic and Sanpic, are removing from Avenue Road, Camberwell, London, S.E.5, to larger premises at Staple Street, S.E.1.

Mr. L. Arden, Ph.C., Winchester, having sold his premises in High Street, is removing to 5 Southgate Street. He is temporarily carrying on business at 15 Southgate Street.

T. HARRISON & Co., Burnley House, Willesden, London, N.W.10, have been appointed agents for Gius Scaccianoce & Co., Paleemo, manufacturers of Sicilian Essential Oils, and E. Sacche & Co., Leipzig.

GERTH VAN WYK & Co., sole agents in Great Britain and the Colonies for Dr. Hommel's Hæmatogen, is to be carried on under the style of Hommel's Hæmatogen & Drug Co. The manager is Mr. Alb. Eger.

ROCKE, TOMPSITE & Co. PROPRIETARY, LTD., manufacturing chemists, are removing their London offices from 4 Redcross Street, E.C.1, to Australia House, Strand, W.C. The company's warehouse is situated at Stepney, E.

Mr. W. E. Mason, chemist and druggist, 89. Acre Lane, Brixton, London, S.W.2, has purchased as from June 14 the business of the late Mr. W. H. Flood, chemist and druggist, 385 Durnsford Road, Wimbledon Park,

THE business which until recently was carried on by the executors of the late Mr. W. Arkle, chemist and druggist, 13 Penny Street, Lancaster, has been closed. Mr. Arkle was the successor of Mr. Joseph Albright, who contributed some interesting reminiscences of business in the 'forties to our Jubilee Issue in 1909.

George T. Benton & Son, produce brokers, 30 Mincing Lane, London, E.C.3, intimate that Mr. Frank Ambrose Benton is retiring from Mincing Lane on Junc 24, and that the firm of George T. Benton & Son will cease to exist. A. Tooley & Co. will carry on the business from that date at the same address in their own name, and will have the assistance of Mr. F. Vincent and Mr. F. Dowling, who have been associated with them for many vears.

Information Department INFORMATION WANTED

J/156.	"Chy-na-Lin"	collar	ı
. ,	po ishing block		
D / 06	Contessa Nettell		

(Stuttgart) Cameras | Dietic Water (Hull | preparation) Esmetil Ointment B/315. Dietic

L/96. M/86. G/315.

Higueron
Jones' "Excelsior"
mixers and sifters
K.O. Insect Powder.
(The Underworld Vermin Destroyer Association) B/206.

D/76. " Kashmiri"

E/196. Morley's Napth Soap
S/186. Noufiline stain remover
L/166. "Princess Pat" rouge
M/196. Rhodes' Ki-Nora Nerve
Tonic

Seccum capsicum S/86. E/196. Silverol (for horticul-T/126.

tural purposes)
Tooth brushes marked
"SS.Co." in a circle design

INFORMATION SUPPLIED

Andreno-Spermin Co. L/116 Biozone. L/66 Capsolin. C/126 Coloritc. C/56 Crooke's collosols. R/86 Dangerous Drug Act registers. L/76 Decoltene. L/86
Dional. C/126
Kalos liquorice juice. D/116
Kandu. A/116
Kasemrl. R/86 Kleinert's rubber goods. S/46 Omnopon. R/86

"Oak Tree" marking ink. W/285 Pantonon. R/86 Papier maché N/126 containers. N/126
Pompeian massage cream.
T/86
Salunol. M/76
Soda water fountains. K/116
Soxos foot easer. L/75
Synol soap. D/116
Tablet and cube wrapping machinery. R/26
Turvey treatment. M/86

Observations and Reflections

Poisons Law,

which the pharmaceutical student used to regard as a subject that might be mastered in a few hours on the eve of examination, has now become one of the most formidable obstacles in his course, and it is not an uncommon thing, I am told, for a candidate who has passed in every other subject to fail in this. No wonder, indeed, that where "legal luminaries are only rushlights" the aspirant for qualification should lose his way. "The glorious uncertainty of the law" could hardly receive a more striking illustration than that afforded by your last week's leader. But all the skill and acumen with which you continue to unravel intricate knots cannot make everything quite plain to the lay intelligence, and you would no doubt admit that your judgments are open to revision: where the law-maker is himself uncertain, the commentator cannot infallibly get at his meaning. There is one point that seems to me especially in need of elucidation: What, precisely, is the meaning of the term "wholesale"? "Casual transactions" of a wholesale kind are referred to as not within the exemption; but a good many chemists who are ordinarily and ostensibly retailers habitually supply other retailers with goods—it may be with their own preparations or it may not—and definitely lay themselves out to do it. These are not "casual transactions." Are they "sales by wholesale" or are they not? Where is the line between wholesale and retail to be drawn?

A Superannuation Fund

for all British chemists and druggists hardly comes within the range of practical politics. In the first place, it is not wanted. The majority of British pharmacists either die in harness or retire from business sufficiently well provided for. In the second place, the difficulty of raising a sufficiently large fund would be virtually insuperable. In the third, the difficulty of administering the fund equitably would be almost equally great. Is there any precedent for such a scheme for any body of tradesmen, or can any analogy between such a fund and the superannuation funds of other bodies be shown? The conditions of British pharmacy are unsatisfactory enough, but surely they are not so bad as to call, for or even to justify such a proposal as this.

Rubbish

is none the less rubbish because it is spoken by a man who wears a white choker. The Rev. J. Pollock, of Belfast, evidently spoke more from prejudice than from knowledge when he said that drink had ruined homes "just because it had been obtained from licensed chemists." What mysterious qualities, one wonders, had been imparted to the stuff by passing through a chemist's shop? If the speaker meant that the fact of its being ostensibly a medicine had disguised its real character from the guileless "abstainer," I should like to remind him of the story of the well-known temperance lecturer who, having been given a tumbler of champagne as ginger beer and asked if he would have another, said, "Thanks; it's the very best pop I ever tasted." The "ill-informed total abstainer" is a much rarer bird than is sometimes supposed. I once used to supply a certain Nonconformist church with British port for sacramental purposes: it was chosen for its supposedly non-intoxicating character. I pointed out that it contained more alcohol than some much sounder foreign port I could supply. But no: it was enough that the other was supposed to be non-alcoholic.

During the Time

referred to by me last week, when I was in business in the little town from which I write, ringworm was one of the most frequent "minor ailments" for which I was called upon to prescribe. I found a mixture in equal parts of absolutely fresh sulphurous acid and glycerin the most efficacious safe application, and for years used no other. One case I particularly remember of a girl who had contracted the disease from calves, and had been treated by a local

doctor without effect. Her head, neck and shoulders were so covered by the fungus that only on the edges could a "ring" be discerned. A fortnight's treatment sufficed virtually to effect a cure. Another case was that of a litter of voung pigs: this proved more troublesome, but the treatment was ultimately successful. (See C. & D., June 16, p. 848, "Phenacetin's" query.)

Mr. H. E. Brown,

in his address at Hull, did not date his reminiscences very strictly. There is much virtue in "about," but, allowing for that, Hull pharmacy must have been very much behind the times if the description given of it by Mr. Brown applies to any date that can properly be referred to even as "about" thirty-five years since. The terms of apprenticeship he quotes were then quite out of date in places I knew not very far from Hull; in these places we should have been very glad indeed to have got Is. 1½d. for any "patent"; we by no means sold everything under our own name, several wholesale houses kindly pushing their own pseudonymous preparations upon us; and the great stores were quite firmly established. With everything else that Mr. Brown said I am in hearty agreement.

Let us be Fair,

even to the panel doctor. Probably nobody is less master of his own time than he, and his unpunctuality is as great where non-panel patients are not con-cerned as where they are. He simply cannot help it. The charge of inadequate diagnosis, again, is more easily made than substantiated. Nine-tenths of the cases submatted to him are probably trivial, and receive as much attention as they require. Here, again, the two classes of patients receive at a first visit very much the same kind of treatment from a busy man. The "average kind of treatment from a busy man. The "average patient," being an average human being, is ready enough to grumble, and if serious occasion arose he would not be deterred by the fear of being mixed up in an inquiry. The exception proves the rule: the fact that complaints are comparatively rare may be taken as proof that as a rule there is no real occasion for complaint. I do not, of course, mean to say that there is actually none. We claim, and rightly claim, that as regards our own service occasions for complaint are few; we ought not without more evidence than has ever been adduced to conclude that it is otherwise with medical service. Speaking for my own neighbourhood (and, of course, I do not presume to speak for all neighbourhoods), I am convinced that panel doctors endeavour to act up to their engagements as conscientiously as panel chemists.

The Difficulties,

not to say the dangers, of the international control of narcotics are again shown by the attitude of the United States Government referred to by you last week. Unless an extreme view held by any influential party to the League of Nations is adopted by all, it is clear that no general control is possible; and the danger is that in order to secure such control extreme views, held by fanatics here or there, may be made the basis of legislation that in many countries can only be enforced against the wishes, and it may be the consciences, of the people. The futility of such legislation is proverbial. It is impossible to ignore the fact that the extreme views held with regard to "intoxicants" (and substances that where they are prohibited take their place) in the United States are a greater difficulty in dealing with this question than the material interests of our own or any other country. We, at least, have shown a disposition to sacrifice much in the general interest; but when the sacrifice much in the general interest; but when the sacrifice required is regarded as one of principle it is much less likely to be made. It is quite within the bounds of credibility that before long a demand will be made to include alcohol in the list of controlled narcotics. Alcohol is not much if at all more generally used in many European countries than opium is in India, and its abuse is probably even more common. What will happen then? The attempt to force prohibitions that may be quite proper in some countries upon people whose natural conditions are entirely different can only have disastrous results.





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Editorial Articles

Venereal Disease Report

THE Committee appointed last year, under the auspices of the Ministry of Health, "to consider and report upon the best medical measures for preventing venereal disease in the civil community, having regard to administrative practicability, including cost," has completed its investigation after twenty-eight sittings, and has issued its report (Stationery Office, 3d.). Many of the paragraphs consist-not unnaturally, perhaps-of carefully balanced generalisations on the sociological aspects of the problem; and these, in so far as they rest upon evidence heard and considered by the distinguished jury whose signatures are appended, are unquestionably of value. We learn, for instance, that "so far as conclusions can be drawn from the available figures of attendances at clinics, venereal disease is once more, as it was before the war, sub-'tantially declining.'' Again, the members of the Committee are agreed that "in the present state of public opinion any system of general compulsory notification of venereal disease would tend to concealment, and would prove a backward step." The statistics as to attendance at clinics are dealt with reassuringly in the following passage :-

A large number of cases of syphilis attending these centres were from the commencement of the treatment past the infectious stage. Further, in genorrhoea cases, the standard of cure suggested by the Ministry of Health is very high, and to comply with it patients must be treated long after all bacteriological evidence of the presence of genococci has disappeared. Many cases classed as having failed to complete treatment appear to have ceased attendance with negative bacteriological tests for genococci, and it is reasonable to suppose that a fair proportion of these were not infectious. The conclusion is, that from the point of view of the public health, the defaulting is not so serious as the statistics make it appear. It remains, neverserious as the statistics make it appear. It remains, never-theless, an important factor in the spread of venereal

On the controversial question of the use of prophylactics the Committee, after remarking that "substantial results may reasonably be expected to follow from prophylactic measures, but that the actual result is often less favourable than has been claimed," deal with the minatory attitude of the Venereal Disease Act in these terms :-

At the same time, in face of the fact that disinfection in the case of an individual, if properly and promptly effected, will in all probability be successful, we do not think that there is any justification for putting obstacles in the way of individuals who desire to procure the necessary disinfectants. The law does not to-day prevent the sale of sheaths, which afford by mechanical means a measure of protection against venereal disease, and we think that the law should be altered so as to permit properly qualified chemists to sell ad hoc disinfectants, provided such disinfectants are sold in a form approved and with instructions for use approved by some competent authority. We suggest that the Medical Research Council should be invited to undertake this task. We think, however, that the commercial advertisement of ad hoc disinfectants should be prohibited.

This pronouncement has since been the subject of an approving resolution by the executive committee of the Society for Prevention of Venereal Disease, among those present at the meeting between Sir Bryan Donkin and Sir

William Arbuthnot Lane. The policy of this Society towards the Venereal Disease Act has always been substantially that of the paragraph just cited. As for the average medical practitioner, the report declares that "speaking generally, the general medical practitioner is not yet adequately equipped with the most advanced knowledge of venereal diseases and their treat-ment to enable him to deal competently with all the cases that come before him, and that an improvement in medical education in regard to vencreal disease is necessary." Coupled with this frank admission is the conclusion "that the work of existing venereal disease clinics is of high value, and that the system is one which ought to be encouraged, extended and improved"; and it is possible that the two statements, which are bracketed in the report, incidentally reflect the attitude of the specialist to the general practitioner.

Menthol "Cornered"

In view of the fact that this is the period of the year when users of menthol begin to think of buying their winter requirements, it is of interest to comment on a few outstanding features which govern the market to-day. It may be said without fear of contradiction that the causes which have led to the present position of menthol are regarded as very serious from the point of view of the bona-fide traders and consumers. The way in which prices have been manipulated during the present year has had a very disturbing influence on the buying and selling of menthol by traders. In other words, it means that an apparent purchase by a dealer or consumer is more or less of a gamble, and many years of business experience in the article, or the ability to judge the market, are factors which count for nothing. Consequently this year thousands of pounds have been made and lost on menthol of which the price, to a certain extent, should remain constant, or in which the spot and c.i.f. prices should bear some relation one to the other. We understand that the present forcing up of prices is purely the result of menthol being "cornered" by the combination of a few interested parties, and we have been assured that practically four-fifths of the present London stock, which may be estimated at rather over 300 cases, is controlled by one firm alone, who have declared their intention of getting 45s. per lb. presently. At the beginning of this month meuthol could have been bought at 32s. per lb. on the spot, whereas this week up to 39s. 6d. has been paid between interested parties. Under normal conditions at this period of the year, a stock of from 200 to 300 cases would suffice the trade comfortably until some of the new crop should be in London, or there is some sign of it being shipped. Looking back to about two months ago it is now possible to see tell-tale straws of what bona-fide consumers have to contend with. This may be instanced by the fact that a fair amount of speculative business was done to arrive in new crop menthol at between 27s. and 29s. per lb. c.i.f., and this at a time when the peppermint plant could only just be appearing above the ground, and gradually purchases have been made at increasing prices, until from 38s. to 38s. 6d. c.i.f. has been paid for new crop for June-July shipment. On turning to our records during the first five months of the year it is interesting to note that the price in January was forced up to over 40s. per lb., and during April fell to 29s. History may repeat itself, although it is to be feared in the present instance that high prices will remain for a considerable time. In the following table we give week by week the spot and shipment prices of menthol during the past year :-

1923	Menthol.	C.i.f. prices	
January 6 " 13 " 20 " 27 Feb. 3 " 10 " 17 " 24 March 3 " 10 " 17 " 24 " 31 April 7 " 14 " 11 " 21 " 28	42/- 41/- 40/- 39/6 40/- 37/6, 38/- 37/6 nom. 37/- 36/- 35/- nom. 32/6 32/- 31/6 30/- 33/- 33/- 31/6	JanMarch 35/- " 35/- " 31/6 " 32/- " 32/- " 32/- " 31/- " 28/- 29/6 MchApl. 30/- " 31/- AprMay 30/- " 30/- " 31/6	
May 5 ,, 12 ,, 19 ,, 26 June 2 ,, 9 ,, 16	34/- 34/- 34/- 33/6 33/- 33/-; 33/6	May-June, 32/- 32/- 32/- 32/6 32/6 32/6 June-July, 33/- 34/-	

We understand that sales have recently been made outside of the present "combine" at about 34s. per lb. c.i.f. for June-July shipment, but as these goods cannot arrive here for at least three months, it looks as if during that period buyers will be forced to pay very high prices, so that hand-to-mouth purchases are likely to persist. It may be pointed out that menthol is now used in so many directions in a manufacturing way that the cost of the products containing the drug must be one of continual fluctuation. The hitherto accepted economic theory that price is ruled by the question of supply and demand does not enter into the present calculations, and this is a phase which manufacturers deplore. Moreover, menthol is a popular medicine, and it is inimical to the welfare of the community that supplies should be held up for exorbitant prices, which are out of proportion to the intrinsic value of the article.

The Setback in Sugar

THE decidedly strong conditions which prevailed in the sugar market until towards the end of last month were well in line with the facts which we gave in our issue of April 28 (p. 593). The position was then largely dominated by the bullish arguments in regard to the much-reduced Cuban yield of this season's crop and the considerable shortcomings in world's resources from the estimates that were current six months ago. It cannot be said that there has been any change in the outlook as regards production since then, so far as the current sugar season is concerned, and a strong statistical position in Cuba has still to be reckoned with under the fast diminishing exportable surplus there; but an important new factor on the consuming side, incidental to the considerable falling off in the trade demand on both sides of the Atlantic, has brought about a very sharp reaction from the inflated level of prices seen in the last few months. The cold and wet weather experienced over the greater part of the spring period has, indeed, proved a most disturbing factor apart from the very unsettled conditions which have characterised the transatlantic trade. It is common knowledge that official measures have been under contemplation against the speculative dealings in the New York sugar "ring," but the result of an appeal in favour of a Government injunction is still in abeyance. So far as can be gathered, however, no decision will be made by the Courts for several months, so that the recent sharp bear attacks made upon the speculative position on New York, which were reflected by similar tactics on white sugar futures in Mincing Lane, have probably been encouraged by expectations that a good deal less sugar

will be absorbed by actual consumption than had been anticipated had more normal seasonal conditions prevailed. The expectation of disappointing fruit crops this year points to a more restricted use of sugar for preserving purposes, and the fact has to be noted that general deliveries into home consumption for the second quarter of the vear should disclose a notable setback compared with the returns for the same period last year. The quotations given below as current at the close on Tuesday, compared with the extreme figures touched during May, give some idea of the substantial reaction which has taken place, chiefly within the last few weeks:—

	Highest in May	June 20
Tate & Lyle's cubes per cwt American granulated spot Cuban aw sugar prompt shipment	70/9 to 71/9 65/6	66/- 59/-
e.i.f	32/- 37/- 36/4 29/7	26/- 32/- 27/3 23/6

While successive substantial reductions were recently made by British refiners in order to eliminate foreign competition, the fact deserves notice that their terms were kept stationary throughout the past week, and that the severe slump in white sugar futures, amounting last week to as much as 6s. per cwt., was eventually followed by a rally. The market, however, has generally remained in a highly nervous state, although there seems to be an impression in some quarters that the market has been touching the bottom for the time being. In the case of near positions in white sugar futures, buyers' and sellers' views have become widely divergent, which is indicative of the extremely sensitive feeling underlying the market following on the recent aggressive speculative selling. The outlook all the same is very uncertain, while the trend of the market within the next few months should be determined by the problem to what extent shortcomings in the Cuban crop will be offset by the curtailment of consumption on this side and more particularly in the United States. The Cuban shortage against the previous campaign will presumably not be less than 300,000 tons from the early estimates of a crop over four million tons,, and taking into consideration the much smaller surplus available in Cuba than at this time last season, quite three-quarters of a million tons less remain to be disposed of there before the end of this year than in the same period last year, the whole of the surplus to come forward being one and a quarter million tons. These are (apart from the Java crop to come on the market on the approach of the autumn) the only important resources calculated to govern market conditions, although in the last quarter of the year new Continental beet sugar supplies may make themselves felt if prospects of an increased yield are realised; this entirely depends on weather conditions, which so far have been far from satisfactory. The leading American trade authority recently estimated the total world's production for the season 1922-1923 at 18,168,000 tons, against 17,654,000 tons and 16,748,000 tons respectively for the two previous seasons, the increase this season against the previous campaign thus amounting to well over half a million tons. The chief element of uncertainty is, of course, the extent of contraction in the world's outlet. An analysis of the official returns covering the first five months of this year for this country would indicate a tetal consumption of about 614,000 tons

compared with 622,000 tons for the corresponding period of last year. The reduction thus does not amount to much, although the total for May is considerably less than for the previous month, and the returns for June will doubtless disclose a further falling off. After showing some considerable resistance to the recent weakness, terms for shipment of raw sugar from Cuba were materially reduced last week, partly, no doubt, due to important resales, but first-hand holders, being in a strong position, seem disinclined to meet the reduced terms lately bidding.

Bulgaria

RECENT political events have once more drawn attention to this creation of the Berlin Congress. In 1908, when King Ferdinand declared the independence of the country from the nominal suzerainty of Turkey, assuming the title of Tsar, Bulgaria had an area of 37,202 square miles, with a population of 4,337,500. The accession of territory following the Balkan Wars of 1912-13 increased the population to about 5,500,000, but by the Treaty of Neuilly its area was fixed at about 44,000 square miles, inhabited, in June 1922, by 4,909,700 souls. At present tobacco holds the first place in order of value in the exports. A study of the import and export statistics for 1921, the latest official data available, shows that Great Britain figures third in the table of countries exporting to Bulgaria, the total value of British imports into Bulgaria in that year amounting to 448,692,179 leva, Italy heading the list with 610,895,709, and Germany coming second with 548,335,643 leva. On the other hand, Bulgarian exports to Great Britain only reached the value of 15,610,238 leva, figuring sixteenth in the list of Bulgaria's customers. Pharmaceutically, Bulgaria is Bulgaria's customers. Pharmaceutically, Bulgaria is known chiefly for the fact that it is the principal source of supply of rose oil. However, since 1915, in consequence of the absence of labour during the war and the higher prices realised by growing cereals, the cultivation of roses has declined considerably. Prior to the war the annual production amounted to about 4,000 kilos., but only half this amount was produced during the past year, although the amount obtained in 1922 represented an increase of 500 kilos. over that produced in the preceding year. Bulgaria possesses 167 public pharmacies, worked on the personal concession system, and 7 businesses belonging to municipal authorities, in addition to 22 drug houses. Pharmaceutical matters are dealt with by a commission of three pharmacists, two of whom are owners of businesses, attached to the Board of Health; the Chemical Institute, and also the Hygienic Institute, are both directed by pharmacists. The Bulgarian Pharmaceutical Society, founded in 1892, has 150 members. Owing to the absence of a pharmaceutical faculty, Bulgarian pharmacists are obliged to attend a foreign university—many of them elect to study in Switzerland—and on completion of their studies abroad obtain the State qualification after passing an examination before the Board of Health in Sofia. The Russian Pharma-copeia is the official standard, but the elaboration of a national work has been frquently proposed. In a Report on the Economic and Financial Conditions in Bulgaria, Mr. Douglas MacKillop, Secretary-in-Charge of Commercial affairs at H.M. Legation in Sofia, states that as a general rule little interest has hitherto been taken by British firms in invitations to tender issued by Government Departments, owing, apparently, partly to a mistaken view of the security of payment—not a single case is on record of any default—and partly to a dislike to the difficult conditions stipulated by the different Ministries. So long as competing firms of foreign nationality are willing to accept these conditions, however, there is little prospect of inducing the Bulgarian Government to effect any change in their policy in this respect. If, in spite of these unfavourable circumstances, British imports have attained a relatively high though naturally decreasing figure, it can be laid down with some confidence that a certain minimum exists of demand for British goods, while a change of policy on the part of British traders—which appears to be unlikely and would imply the dangers (as well as the rewards) of taking a certain amount of risk-would certainly stimulate and increase that demand.

The Chemists' Exhibition

THE twenty-fifth Chemists' Exhibition, organised by "The British and Colonial Pharmacist," opened at the Central Hall, Westminster, London, S.W., on June 18, and closes on June 22. Looking back to the records of exhibitions of a generation ago, it is possible to notice a distinct advance in the general ideas of display; and present-day visitors may glean useful hints on that aspect of business, in addition to what they may learn about the goods displayed. The exhibits this year, if not sensationally novel, are quite up to the average standard of interest; and music, as on former occasions, is rendered by a small orchestra at intervals. In the following paragraphs we summarise our impressions of the stands :-

Drugs, Chemicals and Pharmaceutical Preparations

ALLEN & HANBURYS, LTD. Prominent at this attractive and comprehensive display is a show bottle of insulin and the apparatus and solutions required for the estimation of blood sugar—an examination which is the complement of the insulin treatment of diabetes mellitus. There is an interesting exhibit of the various glands used in the preparation of the organo-therapeutic products of the company, the pituitary being shown actually in situ. Palatable diabetic foods which may be tasted on the spot "Torch" brand products is shown. Sugared pastilles in comprehensive variety, the well-known Allenbury products, and packed drugs are all worthy of examination. Among the advertising material supplied to chemists for window display are miniature reproductions of famous posters.

ANGLO-AMERICAN OIL Co., LTD., have an excellent display of paraffin preparations, among which Nujol is particularly conspicuous. Our attention was also called to Petrohol (isopropyl alcohol), the preparation of which of the least pungent obtainable. The ointment and creams sent out by the company, whether in bulk or small containers, are packed in a style eminently suitable for high-class pharmacy. For chemists who put up their own liquid paraffin this is sent out in two- and fire called the account of the called the company. five-gallon decorated enamelled tins, with spouts, and which are not charged. This ensures the contents being uncontaminated, no tin being used twice over.

AYRTON, SAUNDERS & CO., LTD. Some idea of the numerous branches of the drug-trade for which this enterprising Liverpool house caters may be gathered almost at first glance at this exhibit, where an attractive display of drugs, sundries and toilet specialities is shown. Packed goods may be said to predominate, and the attractive shape of the Ayrton white oval for medicines and the delvoix wedge shape for toilet articles are examples of the care in selecting adequate means of presenting good-quality products. British lysol is conspicuous, and the striking carton is a tribute to the quality of work turned out by Ayrton's printing department. The sealing device for peroxide of hydrogen is another point of interest, it being so designed that the keeping properties of the solution are enhanced. Shippers prising Liverpool house caters may be gathered almost at another point of interest, it being so designed that the keeping properties of the solution are enhanced. Shippers of medicines to foreign countries will find much of interest here. Tablets of aspirin, cascara and other medicines are carefully packed in 500's and 1,000's for the tropics, and there is a range of popular medicines for West Africa trade. "Cremosan" is a skin ointment used in different parts of the world; cartons and literature are printed in several languages. A large assortment of foreign labels is issued for medicaments used abroad, and examples can be seen in Arabic, Greek and Chinese, all of which are the work of the printing department at Liverpool.

JOHN BELL & CROYDEN, LTD. The issue of packed goods for the pharmaceutical trade is a comparatively new departure of the company, the usual range of chemists' requirements being issued with "own name" labels. Sterilised accouchement sets and dressings are

among the other articles displayed.

JOHN BELL, HILLS & LUCAS, LTD., display a large selection of the usual range of packed goods, compressed tablets, etc., along with a new series of colloidal preparations. One of the specialities of the company is the cherry-flavoured chemical food, which figures prominently

with cod-liver oil emulsion, combined or separately.

The British Alexadors, Ltd., exhibit T.C.P. (trichlorophenyliodomethylsalicyl), an antiseptic for which great claims are made, backed by the authority of many members of the medical profession. It is said to possess the eight essentials and the five desiderata of the perfect

antiseptic.

BRITISH COLLOIDS, LTD., have added Collosol kaolin to their already long list of colloidal preparations. Kaolin was used with excellent results in 1900 during the Balkan was used with excellent results in 1900 during the Balkan epidemic of Asiatic cholera and also during an epidemic of cholera in Foochow in 1900. In such cases it stops the vomiting, diarrhœa and loss of fluid, because the toxins cease to act as poisons. In some forms of alimentary toxæmia, diarrhœa is not a feature, and in conditions where a laxative action is desired, Collosol backing with physical health and the conditions the conditions of the conditions kaolin with phenolphthalein is a valuable combination. The company are also showing their older colloids, a special spray for iodine oil, a spray douche, and are illustrating the Brownian movement with Collosol mercury. A special bonus offer is being made during the period of the exhibition.

THE BRITISH DIAMALT Co. (H. A. & D. Taylor, Ltd.) impress on the mind of the visitor that their extract of malt is of the highest diastatic power obtainable. The extract can be supplied in several combinations and forms and packed in various styles. For patients who are unable to assimilate malt and cod-liver oil the substitution of olive oil for the latter ingredient is recommended, and is a combination the company have found

much appreciated.

ENO'S FRUIT SALT is shown to good advantage in the "vineyard" of J. C. Eno, Ltd., which conveys in unmistakable fashion the association of fruit with Eno's

well-known product. The colour-scheme which blends with the packing of the various sizes is an effective one.

The proprietaries of C. E. FULFORD, LTD., make a handsome display, deftly balanced, as is the average counter of to-day, as to the medicinal element and the toilet side. The representatives in charge are prepared with full information as to advertising campaigns and so forth.

GENATOSAN, LTD., show the usual range of their products, which include sanatogen, formamint, genasprin, etc. There is a plentiful supply of advertising material offered to chemists (prescription envelopes, etc.). A useful display stand in the form of a tree is offered for showing the products of the company.

C. R. HARKER, STAGG & MORGAN, LTD.—Packed goods and "Peldo," which provides for the hands so effective a protection against grime, are prominent here. Laurence's hair dyes are recommended as effective and safe, as thirty years' experience has indicated. There is shown a novel cap for malt extract jars, which provides a good selling point for an everyday article. To open the jar it is only necessary to compress the top, when the cap may be lifted off. By pressing the sides the cap is again firmly fixed.

Howards & Sons,-Ltd., whose experience of manufacturing fine chemicals goes back rather more than a century and a quarter, have a display that well sustains their great reputation. Fine specimens of drugs (e.g., cinchona) and of chemicals attract attention at once, and from them the eye passes to hydrogen peroxide and Howard's standard ether, both of which are in the usual distinctive packings. Prominence is being given to Avantine, the brand of isopropyl alcohol brought to a very high degree of purity by Messrs. Howards, and concerning which they invite inquiries. Agotan, the powerful uric acid solvent, is also on view, and among many kinds of tablets are Charcoids, the name of which indicates their purpose. Packed goods have been added to since we last visited one of Messrs. Howards' stands by a range of chemicals in barrel-shaped cartons.

HYGIENIC RESEARCH Co., LTD., exhibit a specimen window-display of preparations containing as the active

ingredient "Ruby Balm," a disinfectant agent. The specialities include oils and soaps for human and for veterinary use. A publicity campaign is in force in the Press, and generous terms are offered to the trade.

The International Chemical Co., Ltd., are exhibiting such familiar articles as Bisurated Magnesia, Lavona Hair Tonic and Bitro Phosphate. Bisuroids and Blood-Iron Phosphate have been recently re-introduced, and, in attractive packages on cards are suitable for display purposes.

purposes.

J. F. Macfarlan & Co. have a capital display of several of their best-known products, including Opoidine, 1 gr. of which represents the total alkaloids of 5 gr. of opium. Various preparations of this interesting substance are on view, as also are chloroforms—that derived from acetone being, of course, far less costly than chloroform made from ethyl alcohol—ether, and a lysol containing at least 50 per cent. of cresols. It is of interest to note that Messrs. Macfarlan are circularising the medical profession respecting their specialities.

Menley & James, Ltd., have, as a prominent feature of a well-planned exhibit, a full range of Iodex products, the use of which, we learn, is firmly established in medical practice. Emphasis is also given to the company's aspirin, the purity of which has long been recognited; and their Iodised Throat Tablets are also being extensively prescribed. Compressed tablets are being attractively packed by Messrs, Menley & James in "own-label" styles suited to the requirements of individual pharmacists, such points as the use of suitable excipients being worked out experimentally before the tablets are listed.

Parke, Davis & Co. have made Euthymol tooth paste the centre feature of their display, and call attention to the latest advance. As the paste could not be improved, the immovation is in the container, which now has a captive spring cap. Apart from their well-known products, such as Fecto, hydrogen peroxide, serums, phylacogens and others, mention must be made of Dermaseptic shaving soap, which is of particular interest in that the sale is restricted to chemists under the Pharmacy Acts.

THE SEMPROLIN CO., LTD., is concentrating chiefly on Semprolin emulsion, Carmex, and oxygenated tooth powder (O.T.P.). The first-named is already well known, while the virtues of the second were ably extolled by a nurse. The tooth powder is stated to be prepared with a soluble base which, when it comes in contact with the moisture and impurities in the mouth, gives off oxygen, disinfects and leaves a remarkably refreshing feeling.

WRIGHT, LAYMAN & UMNEY, LTD., have a representative display of products of the company's coal-tar preparations, including, of course, the well-known soap, as well as the ointment and other specialities. Chemists who visit the stand will hear of a bonus in connection with the soap. Tinned ointments are a special feature of the display, and there is an attractive range in the "Grasse Roses" series of toilet preparations. The series of Umney's "ettols," of which Rosettols is, perhaps, the best known, is conspicuous.

Charles Zimmermann & Co. (Chemicals), Ltd., are interested in a chocolate confection, which is obtainable both medicated and as a sweetmeat. Each piece, we were told, contains about ½ grain of colloidal iron, but this, as we know from experience, is quite tasteless. An excellent sample of olive oil, stated to be bottled by actual olive growers in France, is to be seen at the stand, and Idozan, a colloidal iron, which neither blackens the teeth, dicturbs the digestion, nor causes constipation, is finding many advocates among the medical profession.

Other houses showing in this section were:—HUMAGSOLAN, LTD. (hair-nutrition tablets); JEYES' SANITARY
COMPOUNDS CO., LTD.; MALTINE MANUFACTURING CO.,
LTD.; W. T. OWBRIDGE, LTD.; PHYSIKURATE, LTD.;
THE CHARLES H. PHILLIPS' CHEMICAL CO. (Milk of
Magnesia).

Toilet Preparations and Requisites

AMAMI, Ltd., are confining their attention chiefly to shampoo powders and lavender sachets, but in connection with the latter they have produced one of the most novel displays at the exhibition. At either end of the stand we saw a tub, in which lavender was growing, while between

them was a pile of snowballs filled with layender flowers (grown in the private garden of Captain R. H. Brittain, M.C., at Old Southgate, London, N.), and decorated with holly.

Ansell Bros. & Vanderkar show particularly fine specimens of powder bowls, of which they can offer about 300 designs. Both the hand-painted and cut-glass varieties are decorative as well as useful, and the range of prices is accommodating to the requirements of the purchaser.

Bridgen & Griffin (proprietors of the Crystal Cut Glass Co.) have a striking display of puffs, puff bowls, perfume sprays and cut-glass goods in general. At one end of the scale are Dresden china bowls, and at the other is a remarkably cheap line in lavender smelling salts. Holders for back puffs and artistic tassel puffs in black and silver or in purple and gold are among similar novelties that strike the eye; and there are many other dainty and appealing toilet products worth inspection.

T. F. Bristow & Co., Ltd., emphasise that they cater for all classes of business, and to show that excellent displays can be made with a small outlay of material and money have divided a portion of their stand into windows, which are effectively dressed with their products. A special feature of the exhibit is the case devoted to the Georgian series of toilet requisites, while other sections of the stand are allotted to a range of medicated ichthyol and other soaps, perfumes in artistic containers, and novelties for Christmas trade.

containers, and novelties for Christmas trade.

W. J. Bush & Co., Ltd., have recently introduced, among other lines on the perfumery side, the Devonetta perfumes, a companion series to the now well-known Devon violets, lilies and lavender. A propos the lastnamed odour, a Potter & Moore's Mitcham lavender soap and Health Bloom complexion (vanishing) cream are now available, and Buisson Frères' oriental poppy perfume is obtainable in wickered bottles. The chemical side of the company was represented at a small stand adjoining, an exhibit within an exhibit to be more precise, at which concentrated flower and essential oils, vanillin, thymol, cream of tartar, and salicylates occupied prominent positions.

A. CONNELL & Co. have a stand devoted to Melba toilet preparations, which, as they remark in the catalogue, the enterprising chemist would be sorry to miss. The mauve colour-scheme of the series is, in fact, unusually attractive; and it should be added that the series includes a "galaxy" of face powders adapted to all demands for grades, perfumes and prices. Material for window- and counter-display is available.

The Crown Perfumer Co., Ltd., have arranged their stand to represent the window of a chemist's shop dressed with the red and gold series of the Crown Toilet Dainties. Of the two side windows one carries Crown Lavender Salts and Mitcham Lavender Bouquet, and the other eau de Cologne. It is pointed out that the display is made without the addition of expensive adjuncts, and can be arranged in a few minutes. Two introductions since the last exhibition are a vanity bag compact powder, a solid powder in four shades, packed in an attractive form with a mirrored lid and puff, and an improved Mitcham Lavender Bouquet, the label of which is designed after the "Blue Town" showcard used for many years in connection with the Crown Lavender Salts.

The De Vilbiss Co., Ltd., manufacture such a variety of medical and perfume sprays that he would indeed be a fastidious pharmacist who could not satisfy his requirements at the company's stand, where the sprays, which are fully guaranteed, are admirably displayed. At the back of the stand a "picture" in a gilt frame portrays a "golden series," on black ground, to great advantage. Mr. D. J. Parry mentioned that he has practically recovered from his recent accident, and hopes shortly to be "on the road" again.

Dubarry et Cie exhibit the products of the perfumer

DUBARRY ET CIE exhibit the products of the perfumer at their best in the comprehensive display of perfumes, bath salts, manicure sets, and other articles at a charmingly arranged stand. "Golden Morn" is selected as the setting, and chemists familiar with the distinctive packings hardly need any reminder of the quality of the articles themselves. This series offers a complete range

of toilet luxuries, and there are many others which cannot fail to meet with the appreciation of visitors to

THE ERASMIC Co., LTD., have prepared a representative display of their soaps and perfumes, but perhaps the élite is the showcase containing the black and gold series of toilet requisites. These and the Roman bath soap have already met with much success, which, it is confidently anticipated, will be greatly increased before the close of the exhibition. A mechanical lighting advertisement depicting an aeroplane forming "Erasmic shaving stick" had on the opening day aroused considerable comment and inquiries as to when it would be supplied to chemists.

FURS UNLIMITED, to whose unique powder puffs we have recently called attention in the C. of D., tell us that the popularity of their products is rapidly increasing. These puffs, which are designed by a woman for women, are made from the down lying underneath the hair of a certain breed of rabbit. New designs are continually being devised to meet popular tastes.

P. H. GALLOWAY, LTD., are showing their Royal Seal pomade and cough syrup, both of which occupy prominent positions in a good display of brilliantines, hair tonics and face powders manufactured by Jules Frères,

Ltd., and reserved for chemists' trade only.

D.&W. GIBBS, LTD. Prominent among the full selection of toilet soap is an advance selection of Christmas lines consisting of handsome coloured round boxes of six bath tablets and a nickel soap container. The Lavender and Daffodil series of square toilet tablets are nicely packed. A specimen window-display is an attractive illustration of what can be done in this direction, and chemists near London can benefit from expert assistance in this matter.

Francis Newbery & Sons, Ltd., occupy two stands, one of which is devoted to several lines for which they are agents, such as Cuticura and Wampole's preparations. At the other, Mr. H. A. Riles, who is in charge, was expounding the virtues of a capital range of toilet preparations when the C. & D. man called; and, in fact, it would not be easy to find in any exhibition a more comprehensive display of druggists' sundries, ranging from high-class manieurs sats to pail burshes at from high-class manicure sets to nail brushes at popular prices. Messrs. Newbery appropriately acknowledge the pharmaceutical element with a display of Newbery's embrocation, lavender and peppermint oils, health

salts, and other front-counter goods.

A. & F. Pears, Ltd., have designed part of their stand as a replica of the first shop of Mr. Andrew Pears, in Gerrard Street. The quaint old shop, with its low window, its small panes of glass, and the covered curved roof and old-fashioned door, are a striking contrast to the pharmacy of to-day and to the other stands in the exhibition. Displayed in the shop windows were rows of old pharmacy pots and one of the original tablets of soap manufactured by the proprietor, and stated to be 135 years old. The first known advertisement of Mr. Pears, dated 1803, and another 1810, are among other items of that period to be seen. On passing from this shop to Messrs. Pears' modern exhibit, one finds the "regalia of the toilet" in appropriate surroundings and photographs of the prize windows in the recent competition held by the company.

Pearson & Say, Led, have an extensive array of powder puffs and bowls, many of which are of novel design, and all of exquisite www.manyhip. The competitions are designed as a supply of exquisite www.manyhip.

design and all of exquisite workmanship. The combination of the handle puff and bowl and the puff attached to the lid of the bowl, the advantages and hygienic virtues of which are obvious even to those not in the habit of using them, are two lines which show that the user is considered in other ways in addition

to quality and price.

PERSODENT Co. suggest that chemists should link up with the firm's publicity campaign, and for this purpose an ample supply of show material will be supplied. Several virtues are claimed for this modern dentifrice, the basis of which is calcium triphosphate, in combination with pepsin. It is packed in a distinctive carton and certainly lends itself to display purposes. The Decoater toothbrush is shaped, both in respect of the handle and the bristle, with the object of reaching those parts of the teeth which are left untouched by the majority of brushes used.

PRICE'S PATENT CANDLE Co., LTD., occupy an excellent position with a display of corresponding excellence. The C. of D. representative's attention was called to a perfume newly introduced and known as "My Garden," packed similarly to and in the same sizes as "A Summer Night," but with a distinctive appearance and bouquet. A wickered eau de Cologne in a new shape also attracts the eye, as does a Cologne soap in squares. Such popular lines as green watch-shaped lavender water and English "lavender soap are also in evidence, to English "lavender soap are also in evidence, together with shaving sticks in this lavender series and in the equally well-known Regina series. Messrs. Price lay themselves out to supply own-name soaps, with showcards, in a great variety of style,

SALTRATES, LTD., have an imposing display of their well-known products, including Kal-sel, Nemolin, and, of course, the two Saltrates. Bonus terms and an

abundance of showcards are on offer.

The booklet of testimonials distributed at the "Sam-BOY" stand affords some idea of the way in which this hair tonic has "caught on." Samboy is put up in three sizes, and, incidentally, has an asset in its distinctive

The distinctive perfumery of M. VIVADOU was attracting a good deal of attention when our representative called, and Mr. F. A. Bell, the London manager, was surrounded by a miniature crowd. The smart appearance of the Mavis series is alone almost sufficient to account for its popularity. The "Arly" eau de Cologne is another ready seller. We note that the retail prices of some of the Vivadon specialities have been reduced, the margin to the plantagest remaining a generous one.

the margin to the pharmacist remaining a generous one.

Among other exhibitors in this section were :- Calnan's (brushes, soap and perfumes); HARDING & Sons (Phillipe Henri's shampoo powder); R. Plato & Bennett, Ltd. (powder bowls and combs); C. A. Stokes, Ltd. (Parfumerie Berthon Frères and De Rona et Cie); Sutcliffe & Bingham, Ltd. (Khovah health salt); Associated Supply Houses, Ltd. (toilet preparations); T. G. Heighington (sprays); Kolynos, Inc.; Silk's Toilet Co.; The Vinolia Co., Ltd.

Miscellaneous

Beatson, Clark & Co., Ltd., are exhibiting almost a complete range of glass bottles, including dispensing flats, recess labelled shop-rounds, measures, etc. Among the stoppered bottles is included one with a patent stopper, the rim of which covers the mouth of the bottle,

rendering it completely dustproof.

H. T. BOOTHROYD, LTD., are showing an emulsifier which should meet with a ready demand from the retail chemist who makes from one to three gallons of emulsion at a time. This machine, it is claimed, has an action equivalent to a number of small pestles working at a speed which results in 4,500,000 blows per nour. The result can be seen under the microscope, and compared

with a film of an emulsion made in the ordinary way, is a tribute to the efficiency of the emulsifier.

THE CELLOPHANE Co. tell us that new uses are being continually found for Cellophane, one of the latest being for covering showcards. Many examples at their stand demonstrate how, apart from its preservative properties, this wrapping enhances the appearance of an article.

A. F. CORBETT & Co. have a stand of stands, but particularly called our attention to their See-all counter screens and showcases made of plate-glass, designed for quick serving and preventing pilfering. They are made in all sizes to suit the customer. Rustic stands for perfumes and others for toothbrushes, made to clip on to shelves or revolve, are among other fittings of interest.

CRESSWELL BROTHERS (Branch, International Sponge Importers, Ltd.) had a show of excellent honeycomb and Turkey sponges in original cases. There were also sponges on cards and rubber sponges, while chamois leathers, face leathers and loofahs added variety to an

exceptional display.

Dols Volatalise Flannel is a pure wool cloth, which it is claimed, is particularly indicated in cases of sciatica, neuritis, etc. It is not a capsicum preparation and the medicament is so closely in contact with the wool that the flannel may be repeatedly washed without destroying the active properties. Dols flannel is sold in bulk for making into various articles as the case requires,

and specimens are on view at the stand.

JOHN DOWELL & SONS, apart from a comprehensive exhibit of dispensing and other bottles, were showing two novel infant soothing feeders, the Dormel and the Do-well. These might be described as a combination of "dummy" and feeding bottles, as instead of the "dummy" and feeding bottles, as instead of the ordinary bone or indiarubber handle is a small indiarubber or glass container, in which is inserted honey or other palliative.

FASSETT & JOHNSON, LTD., have a capital display of many of the proprietary articles whose names are household words-Angier's Emulsion, Mulsified Cocoanut Oil Shampoo, Diamond Dyes, California Fig Syrup, Sloan's Liniment, etc. A more recent introduction is that of the toilet preparations and perfumes of Richard Hudnut, which include a number of unique products.

The exhibit of GLAXO is noteworthy for the thought that has been given to the pharmacist as a salesman. The great experience of the manufacturers has been brought to bear on the question of profitable advertising, and the representatives at the stand can give their visitors valuable "wrinkles" as to how to appeal to the

The GREENWICH LEMONADE Co. have a striking and varied display suggestive of the brilliant summer weather that, no doubt, is in store. The lemonade powders for which the company is famous—"G.O." and "Greenwich" are prominent, and are flanked by seidlitz powders, B.P. and extra strong, cellophane-wrapped. Popular lines, such as health salts (in tins), "Top Hole "mints—a good name—Gipsy foot paste, and (in case the weather remains sullen) G.O. Lung Linctus, are also in evidence; and it would be quite easy to make an attractive window-display of "Greenwich" lines alone. Showcards and other advertising material are supplied for the various preparations, the prices of which are consistently popular and bear excellent trade discounts.

HOOPER & Co. make an effective display with air beds and cushions, hot-water bottles and high-class goods of an allied character. Hooper's Laxoline, Dr. Bird's

Cough Linctus, and aerated waters are also on view, together with druggists' sundries.

Keene's One-night Cures, Ltd., are showing the window-display of corn-cure which is presented with certain sized orders. The new company have put all their preparations on the P.A.T.A.

Jules Lang & Son specialise in all kinds of bottles for medical, perfumery, and food requirements, and to judge from the variety shown, the visitor can have no difficulty in grasping this fact. Dispensing flats, bath crystal jars, pastille jars, and exhibition bottles are arranged side by side with the smaller examples of the bottle-makers' art.

Excellent work in developing and printing is being

done by LESLIE'S DEVELOPING SERVICE, and some beautione by Leslie's Developing Service, and some beautiful effects, notably in Messrs. Leslie's new sepia toning, are to be seen at their stand. The enlargements, too, are noteworthy for good definition and artistic graduation of light and shade. Brunal, the company's one-solution sepia toner, is put up in four sizes, and the trade discount is liberal

trade discount is liberal.

OWTAZIN Co., the proprietor of which is Mr. John Tolmie, chemist and druggist, are showing twenty different patterns and colours of vacuum flasks, and the prices are such as to be of interest to both wholesaler and retailer. The quality of the goods is demonstrated by the orders received from all over the world, and in more than one instance followed by repeats as soon as the goods arrived at their destination.

JOHN W. ROYLE, LTD., have a well-placed corner stand, the contents of which indicate that the natural mineral water industry has come into its own again. Prominence is given to Vichy, Vittel, Birmo and Rubinat; and if the trade is ever again plagued with the pre-war multiplicity of imported wavers, chemists may rest assured that Messrs. Royle will still be offering the best of these, and on the best terms. Mr. Royle, in conversation

with our representative, emphasised the promptitude in delivery that is a feature with his enterprising company, who, among other things, are distributing agents for Bengué's preparations and Zol emulsion.

A. F. Sherley & Co., Ltd., are showing a full range of their dog foods and medicines, including a new size of Nervine. There is also a new edition of "Hints to Dog Owners."

J. M. SMITH & Co. are specialists in the manufacture and packing of carbolic and other disinfectant preparations. But pinogen, a recent introduction, packed in tins, is an efficient fluid germicide which does not contain carbolic acid. A sanitary fluid is shown in containers ranging from half a pint to a gallon. An antipyorrhœa dental cream figures among various other dentifrices, and specimens of chemists' own-name specialities are prominent.

Sorbo Rubber-Sponge Products, Ltd., have on view

a comprehensive display of products made from or based on their rubber-sponge material. Medical surgical plasters are a useful line, and finger-stalls in sealed containers strike one as an improvement on the untidy assortment familiar in the pharmacy not long since.

SUTTLEY & SILVERLOCK, LTD., draw particular attention to the unit design cartons, which enable the chemist to adopt a particular design for his own series of prepara-Among the comprehensive selection of labels, seals

tions. Among the comprehensive selection of labels, seals and other stationery there are useful folders for optical and photographic chemists, and calendars are an important feature at this exhibit.

Thompson & Capper, Ltd., devote a great part of their stand to specimens of their photographic printing and enlarging, both of which are of uncommon excellence. Messrs. Thompson & Capper make quality their first aim, and it is evident that artistic brains are behind some of the miniatures and the coloured enlargements that are on view. The enlargements, in particular, show what can be done with ordinary snapshots in skilled hands. Another feature of the stand is a display of Cornol, a corn eradicator, in connection with which a bonus scheme is announced.

The "Cow and Gate" milk food of The West Surrey

CENTRAL DAIRY Co., LTD., makes an imposing display, illustrating, incidentally, the possibilities of a one-article window. The food itself has long had a high reputation in the nursing profession, and its increasing popularity is not surprising.

larity is not surprising.

WHITAKER & Co. have a characteristic display of their "Luton" hat dyes, "Auroral" cold-water dyes, and "Luton" fabric dyes, products that lend themselves admirably to the making of an artistic stand or window. It is almost superfluous to call attention to the popular "Luton" hat dyes, but Messrs. Whitaker inform us that their "Auroral" series is the only one of its kind in which dark colours are included. A specimen of work done by this cold process was shown us; it is all that can be desired and justifies the claims made. Attractive "sales stimulators" are supplied.

G. H. Zeal, Ltd., who had on view a range of clinical

G. H. ZEAL, LTD., who had on view a range of clinical thermometers which would be difficult to beat for com-pleteness, have made a distinct advance in their Repello pleteness, have made a distinct advance in their Repello model, in which the mercury is reset by simply pressing a small glass bulb at the top. Another device for overcoming the shaking-down problem is the Acello case, suitable for any make of clinical, and working on a principle similar to the Archimedean screw. The mercury column in a clinical with a lens front is often less easily found than in the plain type, and to obviate this difficulty Messrs. Zeal mark their magnifiers with

a small oblong.

a small oblong.
Other exhibitors include:—Brown & Son (stills);
J. E. Garratt (New-Skin and Lemofizz); Horlick's
Malted Milk Co.; Ingram & Royle, Ltd. (mineral
waters); Masson, Seeley & Co., Ltd. (showcard
machine); R. W. Phillips, Ltd. (Philsano products);
Retail Pharmacists' Union; A. W. Shaw Co., Ltd.
(handbooks); Scholl Manufacturing Co., Ltd. (foot
supports); Viscose Development Co., Ltd. (bottle
caps); E. Woolf (teats); E. L. Hopkins (Clarocit);
J. G. Ingram & Son, Ltd. (rubber goods); National
Cash Register Co., Ltd.; Sadler & Moore (tobacco);
United Glass Bottle Manufacturers, Ltd.

Safeguarding of Industries Act

Formaldehyde

AFTER a long interval, the inquiries under Part I of the Safeguarding of Industries Act were resumed by Mr. Cyril Atkinson, K.C., the Referee appointed by the Lord Chancellor, at the offices of the Board of Trade, on June 15, the case taken being that of the complaint that formaldehyde has been improperly included in the Board of Trade list of dutiable articles under the 'Act. The complaint was lodged by the Chemical Merchants' and Users' National Vigilance Committee, which was represented by Mr. Kenneth Swan and Mr. R. Lambert Parry; the Board of Trade, which opposed the application for the removal of formaldehyde from the list, was represented by Mr. Trevor Watson, and associated with the Board of Trade were a number of manuturers in this country, viz., Synthite, Ltd., Birmingham, Lothian Chemical Co., Edinburgh, and the London Chemical Works, Ltd., Southall, who were represented by Sir Arthur Colefax, K.C., and the Hon. Stafford Cripps.

THE CASE OPENED

Mr. Swan, dealing with the case for the applicants, said that formaldehyde at normal temperatures is a gas, but in the commercial form in which it is handled it is a solution, containing 40 per cent. of formaldehyde by volume and from 36 to 38 per cent. by weight. The chemical formula was CH₂O, and it had not got a very long history as a chemical. It was discovered in 1868 by a chemist named Hoffman, and its original industrial application was that of a disinfectant. Since then, however, it had made rapid strides in its industrial applications, which were now very varied. According to his information, the world's output of formaldelyde was about 10,000 tons, or even more, and it was dealt with, as a solution, in barrels and drums. Wholesalers dealt with it in ton lots.

The Referee: When speaking of 10,000 tons, are you referring to the solution?

Mr. Swan said he was, as that was the only form in which formaldehyde is dealt with commercially. Continuing, Mr. Swan said that from the very beginning the commercial manufacture of formaldehyde had been carried on substantially by one generic method, known as the catalytic process. In this process the vapour of the raw material—methyl alcohol—which was obtained by the destructive distillation of wood, was passed over a heated catalyst. Originally, platinum was used as the catalyst or asbestos covered with platinum. Silver had since been used, but copper was now more generally used as the catalyst, the function of it being to occlude oxygen or become oxidised, the oxygen occluded in the catalyst playing a very important part in the catalytic action. The formula for methyl alcohol was CH₄O. When the methyl alcohol vapour passed over the heated catalyst, the methyl alcohol was robbed of two atoms of hydrogen or a molecule of hydrogen. It then "married" the oxygen in the catalyst and water was obtained as the product. That, in very untechnical but fairly accurate language, was what happened. Thus, it was only a two stage process. First of all, there was the destructive distillation of wood to obtain methyl alcohol as the raw material, and the vapour of the methyl alcohol was passed over the heated catalyst giving an ultimate product CH₂O, or formaldehyde. The Board of Trade, in its particulars of objection to the complaint, had stated that formaldehyde was a fine chemical, that it was a synthetic organic chemical, and that it was an analytical reagent. He thought he would be able to show that it was neither. Dealing with the question of synthesis in the production of formaldehyde in any sense whatever, and whether the contention that formaldehyde was a synthetic organic chemical would be seriously persisted in remained to be seen. The view of the complainants was that the process of manufacture was the

very antithesis to synthesis, inasmuch as at no stage at all in the process was there a building up. In the first stage there was a disruption of the molecule, and in the second stage a degradation, inasmuch as the methyl alcohol lost a molecule of hydrogen. His clients had searched the text-books and had been unable to find any in which formaldehyde, produced as he had described, was referred to as a synthetic organic chemical or a synthetic chemical, nor, indeed, was there any hint that the operation so carried out is a synthetic operation. There was one book to which reference would be made in the evidence where every chemical that had its counterpart in nature and was not produced by living organisms by chemical means was referred to as a synthetic chemical, but in the preface to that book the author indicated that he was departing from common practice and nomenclature in calling every artificially-produced chemical a synthetic chemical. With that one exception—which was a book by Prof. Meldola—he had been unable to find a text-book in which the action by which formaldehyde was produced was described as a synthesis or synthetic action. Perhaps the other side had some further literature on the subject.

NOT AN ANALYTICAL REAGENT

With regard to the point that formaldehyde was an analytical reagent, he contended that to call formaldehyde analytical reagent, he contended that to call formaldehyde by this name was an absolute misnomer and a perversion of language. No doubt every chemical at some time or other had been experimented with to see whether it would react with other chemicals, and, of course, every chemical did react in some degree with some other chemical, but that did not make it an analytical reagent. It had been suggested in the cases relating to boric acid, tartaric acid, and oxalic acid, as well as citric acid, that these were analytical reagents, but their use as such was so microscopic that that line of argument was not persisted in, and the Referee was not required to consider the matter from that point of view. Yet the use of these other chemicals which he had named was far greater, for analytical reagent purposes, than the use of formaldehyde; in fact, the use of formaldehyde as an analytical reagent was so minute, microscopical and infinitesimal, that it really did not exist at all. His evidence would be that not one hundredth of one per cent. of the formaldshyde put on the market was used for analytical reagent purposes. If in these circumstances they were going to call a chemical an analytical reagent, they might just as well put every chemical into the Board of Trade list. Sugar, starch and glycerin were infinitely more aptly described as analytical reagents than formaldehyde.

Then came the point as to formaldehyde being a fine chemical. He was not going to say that formaldehyde had been generally regarded by the trade as a heavy chemical; he could give instances in which it had been so regarded, but he was not going to put his case so high as that. He could, however, give evidence that it had never generally been regarded or treated as a fine chemical by the trade. It was manufactured by a very few people, and it was handled by a very few people who, however, came within the class whom one would call heavy chemical manufacturers and not fine chemical manufacturers. It had never been classified as a fine chemical, but was generally put under the heading of industrial chemicals. It was commonly associated with heavy chemicals. Moreover, the way in which this product was handled and dealt in was characteristic not of a fine chemical but of a heavy chemical. Mr. Parry would tell the Referee that it was not a pure chemical, as there was a considerable percentage of methyl alcohol remaining as a residue which had not been got rid of, whilst in some cases about 14 per cent.

was put in intentionally.

Uses of Formaldfhyde

As regards the uses of formaldehyde, these stamped it as a general or industrial chemical, inasmuch as the uses were analogous to the uses to which heavy chemicals were put. For instance, it was used for hardening leather; it had a remarkable property of coagulating glue and was therefore used for fixing glues and sizes;

it was also used in the manufacture of paper; it was used for fixing and discharging colours in the textile industry; for w terproofing; in artificial silk production; for making an artificial ivory known as Bakelite, which had a large use for insulating purposes in the electrical industry; it was used in coal tar manufacture and in the manufacture of artificial varnishes and resins. Further, it was largely used as a disinfectant, whilst a rather morbid use of it was in embalming corpses, and preserving meat carcases, in addition, of course, to its use as a disinfectant. Upwards of 90 per cent. was used for industrial purposes, and a small quantity, not more than 1 per cent., was used in pharmacy, not per se, but in making such things as formamint tablets, in which it did not appear as formaldehyde but as paraformaldehyde.

The Referee suggested that it would be easier to say that the gas was a fine chemical than the solution.

Mr. Swan said that at -20° formaldehyde became a liquid, and at ordinary temperatures it was Reverting again to the Board of Trade allegation that formaldehyde is a synthetic organic chemical, counsel said there was no difficulty in following the chemistry of the reaction, and we should therefore not be troubled in this case with all the perlexing questions which cropped up in the ox lic acid case as to whether which cropped up in the oxinc acid case as to whether one could predict what was going to happen and as to whether the reaction threw any light on the chemical process or procedure. He did not think there was much difference between himself and the other side on this point, but the other side did not admit that it was a degraded product, whereas his contention was that it had come down in the grades of complex substances inasmuch as it had lost some of its hydrogen. Again, he differed from the Board of Trade statement as to the total world's output. His information showed that instead of the figure being 5,000 to 6,000 tons, as stated by the Board of Trade, it was very nearly double that amount. Then as to the statement that formaldehyde is a pharmaceutical chemical, he had stated its pharmaceutical uses and could not agree that it could rightly be described as a pharmaceutical chemical, but even if it were so described, it did not follow that it was a fine chemical, because many other things, such as boric acid and others, were pharmaceutical chemicals, but they were not necessarily fine chemicals. Finally, Mr. Swan took serious exception to the statement of the Board of Trad that formaldehyde is an alcohol derivative. Any chemist would understand that to mean that it was derived from ethyl alcohol, which the ordinary public knew as alcohol, whereas formaldehyde was a derivative of methyl alcohol. As to manufacture, he did not agree that great skill was required, but the other side would

no doubt have something to say about that.

Evidence was then called in support of the complainants' case. As a matter of fact, Mr. Parry occupied the whole of the remainder of the sitting, and he had not concluded his evidence when the inquiry was

adjourned.

MR. PARRY'S EVIDENCE

Mr. E. J. Parry, B.Sc., analytical chemist, supporting the statements made by Mr. Swan, in opening, also referred to last year's edition of Thorpe's Dictionary, which stated that recent researches of Le Blanc and Plaschke showed that the formation of formaldehyde is not due to oxidation, but to the catalytic dehydrogenation of methyl alcohol. It was not, continued Mr. Parry, a direct combination of oxygen with methyl alcohol, but a direct splitting off of hydrogen by heat, so that CH₄O broke down into CH₂O. The hydrogen was set free, and that was a reaction quite independent of the process at all; the oxygen was then ready to combine with it and formed water. The importance of that differentiation was this: the Board of Trade statement alleged that there are two differently constituted bodies combining; but that was totally incorrect. There was no molecular combination or molecular action; it was a labradycenation or splitting up process by best dehydrogenation or splitting up process by heat.

Mr. Swan: You have to have a continuous supply of

oxygen to the catalyst in order to keep the action going.
Mr. PARRY: Yes, and as the hydrogen combines with

the oxygen, further oxygen is ready for it. That has been established by two people and is adopted by Sir Edward Thorpe in the latest edition of his dictionary. The REFEREE at this stage said he would like a description of the method of manufacture.

Mr. PARRY proposed to deal with it from the descripintervening, said he proposed to deal with it from the descrip-tion in Thorpe's Dictionary. Sir Arthur Collega, intervening, said he proposed to call the manufacturers, as no book described the actual details of the process in use by which commercial results were obtained. Therefore, it was no good following the books. The Referee: They may have a book which throws some light on it. Sir Arthur Colefax: I should be some light on it. Sir Arthur Colefax: I should be surprised. Mr. Parry admitted that he had no practical knowledge of the manufacture of formaldehyde inside a works. His knowledge was entirely general knowledge. He believed that the engineering difficulties of getting the plant to a state of efficiency were very great. Sir Arthur Colefax: If this witness does not know, I suggest it is futile to talk about it. Mr. Parry said that more than what he had stated, he had no evidence to offer as to manufacture. The REFEREE: You have no idea how the process is carried out? Mr. PARRY said he was told that the process was not more difficult than the manufacture of artificial manures where fixed nitrogen was dealt with. Sir Arthur Colefax objected to this type of evidence, and the Referee agreed.

THORPE'S PROCESS

Mr. Swan said the process as described in Thorpe's Mr. Swan said the process as described in Thorpe's Dictionary was substantially this: methyl alcohol solution was first vaporised and the vapour was passed through a container in which was the catalyst in the form of oxidised copper, and then heated. This was only a summary of what was in Thorpe's Dictionary and that was the evidence Mr. Parry was giving.

and that was the evidence Mr. Parry was giving.

Mr. Parry, answering questions by Mr. Swan, said
that in the manufacture of formaldehyde there was no
step or stage which could correctly be described as
synthetic. The process started from a highly complicated, one might almost say unknown, molecule. The
destructive distillation of wood gave a mixture of
twenty or thirty different bodies, from which methyl
alcohol was separated and purified and then subjected to
the catalytic process which had been referred to, resulting in a further degradation of the molecule by two
atoms of hydrogen, giving finally formaldehyde. Every
single step in the operations was antithetic to the definiatoms of hydrogen, giving finally formaldehyde. Every single step in the operations was antithetic to the definition of synthesis given in Thorpe and accepted in the camphor case, viz., "In the widest sense of the term, synthesis as used in organic chemistry means a building up of carbon compounds, either from their constituent elements or from groups of differently constituted molecules." Referring to his search of the literature to discover references to formaldehyde as a synthetic body, Mr. Parry said he had been unable to find any such Mr. Parry said he had been unable to find any such reference in Tilden, Beilstein, Ullman's Encyclopædia, Rogers' "Industrial Chemistry," and Meyer and Jacobson. There was also a work dealing exclusively with formaldehyde by Vaneno and Seitler, and no mention was made even in this to formaldehyde being a synthetic organic chemical. The one instance in which it was referred to as synthetic was in a book by Professor Meldola on "The Chemical Synthesis of Vital Products," but in the preface to that book there was a statement which made it clear that the book included in its use of the term "synthesis." both up-graded and down-graded products. Meldola, said Mr. Parry, was an ardent opponent of vitalism, and he wanted to show that there was no substance in nature which could not be produced artificially. Therefore, he used the term synthesis in this book as meaning any substance which could be pro-

duced artificially without the aid of living forms. That was the text of the whole book.

The Referee suggested that it might be said that a building-up was the view held at one time as regards synthesis, but that now chemists held the wider view

which was put forward twenty years ago by Meldola.

Sir Arthur Colefax: That is what I shall suggest.

Mr. Parry, asked by the Referee if there was a later edition of Meldola than the one twenty years old which

he had mentioned, said there was not. It was an address Professor Meldola gave to the British Association and it had been brought up to date in that book. Generally speaking, he did not know any chemist who would accept the statement in the preface to that book as being a true description of a synthesis, and that view was not taken in any of the modern books. The only other book he knew of, which treated artificially prepared substances as synthetic substances, was a little book by a man named Hale, which was published in 1914, dealing with the value of metals in chemistry. This obviously dealt with artificial substances as synthetic and referred to formaldehyde made in the manner which had been described. In all other references which he could find, where the synthetic process of the manufacture of formaldehyde was mentioned, they specifically referred to the true synthesis, starting with a building-up from hydrogen in order to get methyl alcohol, and the Chemical Society's annual reports differentiated between

the two processes in this way.

Passing to the point that formaldehyde is a chemical reagent, Mr. Parry said he had never used it in his life, and he had never heard of it being so used, before the suggestion was made in this case. It did not appear in the List of Reagents issued by the Chemical Society and Society of Public Analysts before the Act, nor did it appear in Merck's book on the subject of testing chemical reagents. Merck also published an index of all the work on the subject of reagents, and it mentioned every case in which someone had tried formaldehyde as a reagent, but in his actual book on testing—which was regarded as a leading authority—formaldehyde was not included as a reagent. The Board of Trade also stated that formaldehyde was used for detecting morphine derivatives, but the fact was that the reverse applied, viz., that morphine was used for detecting formaldehyde. The real reason why formaldehyde was practically useless as a reagent was that it was, without exaggeration, the most active substance in the world. It would combine and condense with anything, and it the same way that one could place very little reliance on any reaction obtained with it. Merck's list of chemical reagents was three times as long as the list issued by the Chemical Society, and yet it did not include formaldehyde. The only book in which he had found it described by the chemical society in which he had found it described as a chemical reagent was in a book by Murray published last month in America, which even then specifically described it as "formaldehyde neutral," which meant that it had to be pure to the extent of being free from acid. Reference was also made to the book by Sutton and Squire as not containing any reference to formaldehyde as a reagent. Dealing with trade lists, it was pointed out that Baird and Tatlock listed it as a bacteriological reagent. Reverting to the statement in the Board of Trade particulars of objection to the application, that formaldehyde is used as a respect for alleadid substitutes of morphine in the sensers. agent for alkaloid substitutes of morphine, in the separaof glucose by means of Fehling's solution as an indicator, and as a test for indol, Mr. Parry said there was no evidence that he could find of the general use of formaldehyde for these purposes. In fact, as he had already stated, it was very rarely and very minutely used as a reagent for any purpose. It was not to be found in the B.P. as a test for morphine substitutes. The Chemical Society's Collected Index for 1903-1912 referred to the synthesis of formaldehyde in various ways, such as starting from carbon monoxide and hydrogen; also to experiments on carbon dioxide and hydrogen, carbon monoxide, hydrogen, and steam and carbon monoxide and steam, and these methods of synthesis were differentiated from the ordinary commercial method, in which a ready-made raw material was used. As a matter of fact, that index made no reference to the usual commercial contact process under the heading of synthesis of formaldehyde.

Continuing his reference to the literature, Mr. Parry mentioned the trade journals as always classifying formaldehyde as a heavy or industrial chemical. Special mention was made of The Chemist and Druggist in

this connection, and similar evidence was given concerning various trade directories and buyers' guides, as well as to the recent publication of the Association of British Chemical Manufacturers, giving some of the chemicals manufactured by the members of that Association.

SIR ARTHUR PROTESTS

During this evidence Sir Arthur Colefax protested against references being made to sources of information without the production of documents, and although the Referee suggested that he did not wish to draw too strict a line in this re pect in these inquiries, he rather agreed with Sir Arthur's view that documents should be produced.

Mr. Parry explained that he had only mentioned certain documents because he could not obtain copies, such, for instance, as The Chemist and Druggist for December 10, 1921, which, he said, gave formaldehyde under the heading of "Heavy Chemicals." (A copy was subsequently produced and handed to Sir Arthur Colefax, who promptly said he did not attach any importance to it, after having asked for it, much to the amusement of Mr. Swan, who said he had gone to some trouble to get the copy after the earlier remarks on the absence of documents.)

Mr. Parry then passed to the question of the purity of formaldehyde, and explained that the usual commercial purity was 40 per cent. by volume and about 36 per cent. by weight. In the commercial quality there were impurities such as formic acid, small traces of acetone, etc. Asked as to how recent his knowledge of formaldehyde was. Mr. Parry said it was so recent that he would, that week-end, be issuing an award in an arbitration concerning some consignments and was allowing substantial damages on account of a poor quality. Answering the Referee, he said that it could not be regarded as a pure body and was never 99 to 100 per cent. pure. Looking at The British Drug Houses list, he said he noticed a reference to "formaldehyde solution, redistilled," and that indicated that The British Drug Houses, Ltd., were redistilling the commercial product and purifying it themselves. Because two grades were listed by that firm, or, any firm, the fact would not be a decisive test that a chemical was a fine chemical. The ordinary commercial grade of formaldehyde, which was usually dealt in, was of such a quality that it was placed right outside the category of fine chemicals at once. It was invariably spoken of, dealt in, and treated as an industrial chemical, which expression he preferred to use to "heavy chemical." It came as a great surprise to him to hear the Board of Trade say that up to recent years formaldehyde had been manufactured by fine-chemical makers.

Mr. Parry Cross-Examined

Sir Arthur Colefax then cross-examined Mr. Parry. Mr. Parry said it was grossly misleading to say in general terms that formaldehyde was a derivative of alcohol. It was a derivative of methyl alcohol, which was a very different body. On the question of formaldehyde being an analytical reagent, Sir Arthur Colefax put it that the fact that a substance was only used to a small extent as a reagent did not make it less a reagent. (Mr. Parry had stated that about one-thousandth of one per cent. of the output was used for reagent purposes; Mr. Swan said one-hundredth of one per cent.) Witness agreed that probably in the majority of cases the formaldehyde handled in this country and in the United States was of B.P. standard of purity, and Sir Arthur Colefax claimed that it must be inferred from that fact that formaldehyde is a substance of a very high degree of purity. Witness told the Referee that if he bought formaldehyde over the counter of a chemist's shop he would not have the right to complain of the quality unless it was found to be absolutely bad on analysis. If it were not bought for medicinal purposes he did not see liow the purchaser could complain, because it did not come up to B.P. standard, although he imagined there would be a right to complain if it were found short in strength. Dealing with the question of the purity of the commercial quality, Mr. Parry said there were other requirements beyond complying with the B.P. standard

of purity. He had had samples submitted to him which contained objectionable quantities of paraformaldehyde, not mentioned in the B.P., which also did not speak of the quantity of free acid. There was also an objection to excess of formic acid and excess of formates, and another requirement was that it should be water white.

As a matter of fact, that was the subject-matter of the dispute concerning which he was issuing the award he had mentioned. One reason for this was discoloration due to traces of organic matter.

These and other answers were got by Sir Arthur Colefax, bearing on his contention that formaldehyde must be of a high degree of purity. Except for the fact that there was water present, and methyl alcohol added to prevent a change into the polymer, formal 2 chyde, as used in commerce, he urged, is a body of a very high degree of purity. Mr. Parry, at the end of a long series of questions, agreed that he could not dispute the statement that formaldehyde is a body of a remarkable degree of purity, taking the facts as put forward by Sir Arthur Colefax, but he added that the view put forward by Sir Arthur did not correspond with the opinion he had obtained from manufacturers outside this country and from users. He was very surprised to hear Sir Arthur put it so high as a remarkable degree of purity.

SIR ARTHUR IN ERROR

Sir Arthur Collegax then took up the question of formaldehyde being a fine chemical, and contended that THE CHEMIST AND DRUGGIST for December 10, 1921, was the only instance in which it was referred to under the heading of heavy chemicals. On this point he called attention to the "Oil, Paint and Drug Reporter," an American journal, which placed formaldehyde under the

heading of fine chemicals.

Mr. Parry replied that in America the method of distinguishing between these things had become very extraordinary. Only this month the Association of Chemical Manufacturers in America had attempted the laborious task of defining a synthetic organic chemical. This definition was "A substance containing a preponderating amount of one elementary body." That seemed to him to be utterly meaningless, but the result of all this was that the definition of these things in America

was very different from what existed in this country.

Mr. Swan put in a formal objection to Sir Arthur Colefax putting in an American journal of this nature. It was necessary first, he said, to know what was accepted, in America, as a fine chemical. The objection, however, was over-ruled.

Sir Arthur Colefax then put it to witness, that one of his reasons, apparently, for saying that a chemical is not a fine chemical was that it had a large industrial use.

Mr. Parry replied that he would say that glacial acetic acid, 98 to 100 per cent., for example, is not a fine chemical because it did not have the characteristics of a fine chemical. It was dealt with in commerce in enormous quantities, it was dealt in by heavy-chemical manufacturers, was made by a comparatively simple process without the attributes of a fine-chemical process which had always been associated with it in these cases, and it was used largely for industrial purposes. The only characteristic associated with it as a fine chemical was a high degree of purity. The same factors applied to formaldehyde and made him come to the conclusion that it is not a fine chemical.

Sir Arthur Colefax then got back again to The Chemist and Druggist, and mentioned the issue for November 22, 1919, in which the reference to formaldehyde was under the heading of pharmaceutical chemicals. Is in this property of the control of the [Sir Arthur is, we think, mistaken; there was then no separate heading of "Pharmaceutical Chemicals" in the Trade Report.—EDITOR.] Mr. PARRY replied by again referring to the issue for December 10, 1921, where it was

quoted under heavy chemicals.

Sir Arthur Colerax next referred to The Chemist and Druggist for September 13, 1919, in which appeared an advertisement of Keene & Co., manufacturing chemists and American merchants, and pointed to a list of heavy chemicals, which included formaldehyde. Witness would not agree that the wording of the

advertisement was such as to leave no doubt that the list in question was intended to be a list of heavy

chemicals only.

Sir ARTHUR COLEFAX resumed his cross-examination after the luncheon interval. Referring to Merck's annual reports, special mention was made to the report for 1906 as containing a reference to the use of formaldehyde as a reagent for detecting indol, and for other reagent purposes. Similarly in the report for 1899. Mr. Parry agreed that these references existed, but the uses mentioned that the second respectively. tioned had scarcely ever been adopted in practice. Counsel next pointed to a list issued by The British Drug Houses, Ltd., which included formaldehyde in a list of "B.D.H. Pure Chemicals for Research and Analysis," and Mr. Parry again stated that there was hardly a chemical in existence which had not been used at some time or other for analytical purposes. Mention was next made of the Institute of Chemistry list of reagents, in which it had been stated by the complainants that formaldehyde did not appear. Sir Arthur Colefax said that that list had been withdrawn. Mr. Parry, on the other hand, said he had asked for a copy, and had been India sale had asked for a copy, and had been told that it was out of print, but the officials at the Institute of Chemistry had looked up the list, at his request, and informed him that formaldehyde did not appear in it.

Sir ARTHUR COLEFAX then called attention to further instances suggesting that formaldehyde is recognised, at least by some people, as a chemical reagent. In a book by Murray on "Standards and Tests for Reagent Chemicals" it was included as a reagent, and in an issue of "Chemistry and Industry" for March 23, 1923, the use of formaldehyde for testing sodium hyposulphite was mentioned. Again, in The Chemist and Druggest for October 23, 1920, it appeared under the heading of "Pharmaceutical Chemicals."

The Referee: You would not suggest that it would not be properly described as industrial?

Sir ARTHUR COLEFAX said he thought it was industrial because its uses were mainly industrial, but the use of the word "industrial" did not draw any distinction between whether it was fine or heavy. A series of questions followed to witness as to formaldehyde finding a place in the laboratory of every organic chemist.

Mr. Parry would uot agree that it would be found there for use as a chemical reagent. His view was that no chemist used formaldelyde to detect substances on anything but a microscopic scale. (The Referee cleared up the obvious point that Mr. Parry meant the scale of operations would be on a microscopic scale, and not that the substances dealt with would be microscopic.)

Sir ARTHUR COLEFAX then came to the subject of whether formaldehyde could be regarded as a synthetic organic chemical. Witness agreed that formaldehyde can organic chemical. Withess agreed that formandeny de the be synthesised, but not commercially, and contended that synthesis involved starting from the elements of methyl alcohol. If that were done in commerce, and the procealcohol. If that were done in commerce, and the procedure followed from that stage, as at present, then he would agree that it was a synthetic process. Sir Arthur Colefax, on the other hand, put forward the view that the fact that a substance could be synthesised from the start brought the material into the category of synthetic substances, even if the synthesis of the new material from which the commercial product was made was not actually carried out in its entirety. This part of the cross-examination lasted for a long This part of the cross-examination lasted for a long time, but Sir Arthur Colefax could not get the answers from Mr. Parry he wished for. Indeed, at the close of his cross-examination, Sir Arthur and the Referee differed as to what Mr. Parry had actually answered.

Sir ARTHUR COLEFAX drew an analogy in this respect between formaldehyde and phthalic anhydride, a synthetic dyestuff, according to him a most widely used expression. In that case, the raw material was naphthaliene, which was oxidised and became phthalic anhydride. Yet it was regarded as synthetic Why, therefore, was

not formaldehyde to be regarded as synthetic?

Mr. Parry in the first place would not agree that "synthetic dyestuff" correctly described some of these substances, although the term was widely used, and he

would not agree that phthalic anhydride was commonly accepted by chemists as a synthetic production. In his view it was not synthetic, because it has not got those elements of synthesis which he held to be necessary before a substance could be called synthetic, viz., a building up process. There were a large number of bodies which were called synthetic, for example, artificial vanillin, and artificial dyes and perfumes, which nevertheless had no element of synthesis in them, and that remark applied to phthalic analydride. If the raw material—naphthalene is the coast of pathelic subsidials was built up from its in the case of phthalic anhydride was built up from its atoms, then he would agree that it was synthetic. In short, the body must be synthesised from the start before it could be called a truly synthetic body.

Sir Arthur Colerax put it as a fact that the vast majority of substances known as synthetic were made from some raw material which it did not pay to synthesise in itself, and that then, by certain chemical reactions,

a synthetic product was arrived at finally.

Mr. Parry stid that in most cases there was a considerable element of synthesis in the operations, whereas in the case of formaldehyde there was not.

The Referee asked Sir Arthur Colefax whether, it being admitted that a substance could be made synthetically, in the manner suggested by Mr. Parry, he would classify all imported substances of that kind as synthetic whether they had been made that way or not. Sir Arthur Colefax replied that it would have to be found out whether

the substance could be rightly or wrongly called synthetic.

The Referre : Would you say that because rubber could be synthesised, then all imported rubber should be called synthetic? Sir Arthur Colefax replied that if the artificial product was synthetic, then it did not matter how it was produced. His view had always been that a substance could be called synthetic if every item in it. substance could be called synthetic if every item in it could be made synthetically, and every item in formaldeby the had been and could be made synthetically. After calling attention to some work by Prof. Wilder. D. Bancroft, of Cornell University, upon the synthesis of formaldehyde from methyl alcohol, Sir Arthur Colefax remarked that the United States Customs had classified formaldehyde as a synthetic organic chemical, and a U.S. Treasury Minute had laid down the following definition of a synthetic organic chemical :-

Any substance which is known commercially as a chemical or drug and which contains carbon in combination with other elements except cyanides, cyanamides, carbides, carbonates and bi-carbonates of metals or organic radicles, and which and bi-carbonates of metals or organic radicles, and which has been produced by any chemical process other than that necessary to extract, isolate or purify the substance from a natural source or to effect its separation from more complex natural compounds by hydrolysis or to form a solvent.

In the course of further questions on this same point, Mr. Parry agreed that the United States is the biggest producer and user of formaldehyde in the world, the figure for their production being put at two-fifths of the total world's supply, that figure probably including

Canada.

In an endeavour to bring witness to his point of view on the subject of synthesis, Sir Arthur Colefax again took him through the various stages of the process of manufacture of formaldehyde, but the net result was that Mr. Parry reiterated his view that the methyl alcohol would have to be synthesised before the process could be said to be a complete synthesis, and as this was not the case in connection with commercial formaldehyde, then commercial formaldehyde is not a synthetic product.

There was not a single step of synthesis from the methyl alcohol upwards. Mr. Parry added that there had been plenty of patents taken out for the complete synthesis of formaldehyde hydr het page of them had been the synthesis of the synthesis formaldehyde, but not one of them had been put into commercial use, and the whole of the world's supply was made on the lines he had previously mentioned.

The REFEREE: Your case, Sir Arthur, is really this, that if you have a raw material which can be made synthetically, that makes the product, however it is made,

synthetic.

Sir Arthur Colefax said he had never suggested that any body was synthetic unless it could be synthesised throughout, but it was not necessary for a body, to be in the list, to be prepared throughout by synthetic methods.

It was quite enough that it had been synthesised-as formaldehydé had—from its clements.

The Referee said witness agreed, subject to this, that in cases, as in formaldehyde, where the commercial manufacture did not go right back to the beginning by synthetic methods, then that substance could not be called

The REFEREE, after further discussion as to what Mr. Parry had actually said, reminded Sir Arthur Colefax that Mr. Parry had agreed that many things were commonly spoken of as synthetic, but did not agree that they were correctly so termed. That seemed to sum up whole-case.

Sir Arthur Colefax: I am afraid I am not prepared to accept that.

The further hearing was fixed for Thursday, June 21.

South African News

(From "C. & D." Correspondents.)

"The Chemist and Druggist '' is supplied weekly to members of all the Chemists' Societies in South Africa.

The Union

THE FOOD, DRUGS AND DISINFECTANTS BILL.—A telegram has been received in London from H.M. Trade Commissioner, Cape Town, to the effect that the Food, Drugs and Disinfectants Bill will not be introduced during the present session of the Union Parliament. Particulars of the bill were published on page 221 of our issue of February 17.

PROPRIETARY MEDICINE TAXATION.—In further reference to the tax on proprietary medicines, which has been modified, as announced in the C. C D. (May 12, p. 653), the following is the official amendment by the Minister of Finance passed on April 18:-

(1) The definition of patent or proprietary medicine will be subject to the following proviso: Provided that the term shall not include any medicine mentioned in the edition of the British Pharmacopoxia at the time being in force in the Union under the Medical and Pharmacy laws, or in the British Pharmaceutical codex, or any official supplement thereto, or to any mixture of medicines so mentioned, when such medicine or mixture is not held out as other matter on or accompanying the container or package, and is not otherwise advertised to the public as a cure or remedy for any disease or disorder in man, and when in the case of a medicine it is sold under the name mentioned in the British Pharmacoposia or British Pharmaceutical codex, or, in the case of a mixture its composition is stated on the label of the container or package. It is further provided that the terms shall not include such other medicines as the Minister may from time to time notify by notice in the "Gazette."

(2) The proposal to levy an Excise Duty on perfumery and other toilet preparations will be abandoned, and in lieu thereof the Customs duties on these articles will be increased.

(3) In order to assist ehemists and others in stamping their present stocks of patent and proprietary medicines, exposed for sale by retail, the Government is prepared to supply the necessary revenue stamps on the applicant therefor entering into a bond with sufficient surety for the value of the stamps surplied, and undertaking to liquidate the bond within one year from the date thereof, by twelve equal monthly pay-

(4) The stamping of all stocks of patent or proprietary medicine exposed for sale by retail, except such as are excluded from the tax by the proviso as aforesaid to the definition of patent or proprietary medicines, must be com-pleted on or before April 30, 1923, after which date stamps will not be issued except on eash payment.

THE METRIC SYSTEM of measurement was put into effect in the southern half of Saghalien Island on April 1, according to the "Japan Advertiser."

SWADLINCOTE URBAN COUNCIL has decided that chemists shall pay an additional charge of 7s. 6d. per annum in cases in which water is not supplied to them by meter.

International Congress of Ophthalmology.—Arrangements are being made for holding the next International Congress of Ophthalmology in London from July 21 to 24, 1925.

Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42, Cannon Street, E.C.4, June 21.

The sensational decline in the German mark this week, followed to a less extent in the currencies of other European countries, has left in its trail a feeling of nervousness and anxiety as to what will ultimately happen. Naturally the produce markets have been temporarily affected, and there is little desire to buy anything but immediate requirements pending a more settled outlook. Prices of crude drugs have mostly remained stationary. Menthol is a feature of the week, and mostly "professional buying" between firms forming the so-called combine has forced up the spot price about 5s. per lb. African cannabis indica has had a further advance, as there are likely to be no further imports from the Cape. Norwegian cod-liver oil has been in fair demand at easier prices. Feuigreek and canary seeds have moved in sellers' favour, the latter owing to a revival in activity from an unduly low figure. Jamaica ginger is slightly easier owing to arrivals, and honey is passing through the usual quiet summer period, although stocks are plentiful and prices reasonable. Shellac has been inactive throughout. Glucose is dearer. In pharmaceutical chemicals there is a continued lack of confidence in the stability of prices and business is decidedly dull in view of economic conditions in Germany. Bromides are unsettled, business being a matter of negotiation; citric acid is steady with a limited business. Hydroquinone and resorcin seem to be a trifle firmer.

Higher	Firmer	`Easier ′	Lower
Aci 1 oils Balsam tolu Cannabis indica (African) Cassia oil Fenugreck seed Glucose Menthol	Acetone Arrowroot Canary seed Citronella oil Cottonseed oil Formaldehyde Hemp seed Mint oil (Jp.) Orange oil (Sic.)	Coconut (desic.) Linseed oil Rubber Wood oil (Hankow)	Caraway oil (c.i.t.) Cod liver oil Sugar Turpentine
1	Naphtha Pitch		

Exchange Rates on London

The following is a list of Continental and other exchange rates against the pound sterling on Loondon prevailing at 4 p.m. on Wednesday:—

Place	Method of Quoting	Par of Ex- change	June 13	June 20
Amsterdam Berlin Brussels Calcutta Cnstntnple* Greece Italy Lisbon Madrld Montreal New York Paris Singapore Switzerland Vienna	Fl. to £ M to £ Fr. to £ Per rup. Pst. to £ Dr. to £ Lire to £ Escu. Pts. to £ \$ to £ \$ to £ Fr. to £ Per dol. Fr. to £ Kr. to £	12.107 20.43 25.22½ 24d. 110 25.22½ 25.22½ 4.863 4.863 25.22½ 25.22½ 24.02	$\begin{array}{c} 11.77-11.77\frac{1}{4}\\ 460,000-465,000\\ 84,60-84,55\\ 16\frac{1}{8}d,-16\frac{1}{8}d,\\ 685-705*\\ 150-160\\ 99\frac{1}{8}-99\frac{1}{8}\\ 2\frac{1}{8}d,-2\frac{1}{8}d,\\ 31,10-31,15\\ 4,71\frac{1}{8}-4,72\frac{1}{8}\\ 4,61\frac{1}{18}-4,61\frac{1}{8}\\ 72.43-72.48\\ 28\frac{1}{8}d,-28\frac{1}{8}d,\\ 25,69-25,70\\ 320,000-330,000\\ \end{array}$	$\begin{array}{c} 11.78 - 11.78\frac{1}{6} \\ 550,000 - 570,000 \\ 86.50 - 86.60 \\ 16\frac{1}{6}d 16\frac{1}{6}d. \\ 670 - 690^{*} \\ 140 - 150 \\ 100\frac{1}{6} - 101\frac{1}{6} \\ 2\frac{1}{16}d 2\frac{1}{6}d. \\ 31.07 - 31.10 \\ 4.72\frac{1}{3} - 4.73\frac{1}{4} \\ 4.62 - 4.62\frac{1}{4} \\ 73.80 - 73.85 \\ 28\frac{1}{3}d 28\frac{1}{6}d. \\ 25.70 - 25.73 \\ 329,000 - 330,000 \end{array}$
Yokohama	Per yen	24.58d.	25\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	25 ₁₆ d.—25½d.

* Nominal.

Cablegrams

New York, June 20.—Business is quiet. Menthol has advanced a further 50c. per lb. to \$9.00. Mandrake root is dearer at 17c., and hydrastis (golden seal) has advanced to \$3.50. Taraxacum is dearer at 16c., and Oregon balsam of fir has declined to \$3.00 per U.S. gallon.

Bergen, June 20.—The total catch of cod for the whole of Norway since the opening of the season amounts to 50,100,000, against 47,500,000 for the corresponding week of last year, and the yield of cod-liver oil is 83,913 hectolitres against 78,436 hectolitres for the same period of 1922. Price of finest new medicinal steam-refined oil of 1923 crop is about 100s. per barrel c.i.f. London, and the market is declining.

Crude Drugs, etc.

AGAR AGAR remains firm at 5s. 3d. per lb. on the spot for Kobe No. 1.

The exports from Japan during March amounted to 431,714 kin, valued at 893,088 yen. During the three mouths ended March 31 they were as follows—

Aloes.—Sales of good bright Cape firsts have been made at the higher price of 40s. per cwt.; good seconds are quoted at 37s. 6d. and ordinary at 35s. per cwt.

The exports from the Union of South Africa during February amounted to 67,400 lb. (£402) against 5.388 lb. (£20) for February 1922. During the two months ended February the exports were 114,746 lb. (£805) against 5,388 lb. (£22) for the corresponding period of 1922. During 1922 the exports were 564,079 lb. (£3,675) against 549,504 lb. (£4,293) in 1921. The destinations and quantities were as follows:—

		192	l.	1922	
· ·	(Quantity.	Value.	Quantity:	Value.
		lb.	£	1b.	£
United Kingdom		130,007	962	127,360	729
India				435	4
Hong Kong		73,686	440	l —	
Straits Settlemen	nts		_	18,440	204
France		25,587	225	41,246	206
Germany		233,698	1,879	214,034	1.297
Port East Africa		37,656	413	33,356	335
Japan		34,676	289	68,337	472
Siam				6,287	50
United States		14,194	85	54.044	373
Argentina				540	5
Total		549,504	4,293	564,079	3,675

Antimony is quiet but steady. English regulus special brands quoted £34 10s. to £35, while foreign is held for £26 ex warehouse, although c.i.f. terms for prompt shipment are about £23.

Areca has been arriving a little more freely in London, the spot values being from about 40s. to 45s. per cwt. Forward shipment is offered at 35s. c.i.f.

Balsam Tolu.—Recent sales were made at 5s. per lb., with 5s. 3d. asked on the spot.

BUCHU.—The exports from the Union of South Africa during February amounted to 27,220 lb. (£3,364), against 5,950 lb. (£737) in February 1922. During the two months ended February 28, 1923, the exports amounted to 54,500 lb. (£7,271), against 11,006 lb. (£1,478) for the corresponding period of 1922.

During 1922 the exports were 124,046 lb. (£15,763) against 124,842 lb. (£21,257) in 1921. The countries of destination were:—

were :—					
		192	21.	1925	2.
	(Quantity.	Value.	Quantity.	Value.
		lb.	£	lb.	£
United Kingdom		31,370	6,349	43,746	5,405
India		250	50	288	44
Australia		4,483	813	3,859	586
New Zealand		200	85	973	170
France		575	115		
Germany		2,825	417	3,008	302
Japan		134	30	-	
United States		85,005	13,398	72,172	9,25 6
Total		124,842	21,257	124,046	15.763
TO 1/4/1 0 0		- L 1,0 T L	41,401	121,010	20,100

CAMPHOR (CRUDE) is dull of sale, Chinese 90 per cent. offering at 3s. 1d. per lb. on the spot and at 2s. 9d. c.i.f.

for June-July shipment.

CAMPHOR (REFINED).—Japanese 2½-lb. slabs offer at 3s. 6½d. per lb. on the spot (at which sales have been made), and at the same figure for June-July shipment.

The exports from Japan during March amounted to 3,987 piculs, valued at 847,113 yen. During the three months ended March 31 they were as follows:—

	1921	1922	1923
To	Piculs	Piculs	Piculs
British India	133	306	4,006 -
Great Britain	225	1,000	489
France	3	622	1,090
Germany	75	123	1,908
United States	557	4,314	5,362
Australia	70	213	. 119
Other Countries	134	200	1,145
Piculs	1,197 •	6,778	14,119
Yen	268,717	1,379,329	2,812,373

CANNABIS INDICA.—It is the Union of South Africa Government which has prohibited exports (not the Zanzibar Government, as mentioned last week), and as a matter of fact we understand that they have given instructions to have all the plants destroyed. London stocks are now extremely limited, and although at the moment it is possible to buy a little at 3s. per lb. (at which price business has been done for fair green), some sellers are holding for decidedly higher prices. A further advance is expected, as the London stocks are getting reduced. Genuine Bombay tops are still obtainable at 17s. per lb.

Cod-liver oil.—Our Bergen correspondent writes on line 13 that the Figure 14 the Figure 15 that the Figure 15 t

June 13 that the Finmarken codfishery is now nearing the close, the participation in it being reduced gradually. The catch last week was fairly good for several districts, and for the whole of Finmarken was 1.7 million cod. The total catch of Finmarken has thus reached 15,400,000 cod, which is a little less than that of 1922, but greater than that of any year since 1914. The total output of all the codfisheries of Norway, compared with previous

years, is as follows :-

		Yield of	
•	Catch of	steam refined	Livers for
	cod	cod-liver oil	crude oil
June 9, 1923	48,200,000	81,012 (Hect.)	16.847 (Hect.)
June 10, 1922	47,400,000	78.259	14,827
June 11, 1921	38,400,000	56,621 ,,	19 699 "
June 12, 1920	36,600,000	54,700 ,,	6'200 "
June 14, 1919	29,000,000	35,000	4'900 ''

The quantity of cod-liver oil produced is now greater than ever in the history of the drug. The market is quiet and the price is declining; to-day's quotation is nominal at 105s. to 105s, per barrel, c.i.f. London, for finest non-freezing steam-refined quality. In London agents have made sales at from 100s, to 102s, 6d, per

barrel c.i.f. for finest new Lofoten non-freezing quality.
GLUCOSE is about 9d. per cwt. dearer at 30s. 6d., duty paid, for guaranteed water-white for June-August delivery, landed terms.

CUBEBS.—Good black offer at £13 15s. per cwt. down

to £13 for ordinary.

Honey is quiet. Good pale set Jamaica can be had at 55s. per cwt., brown to pale amber at 40s. to 45s., and dark 34s. to 36s.; good pale amber part setting Californian is 60s.

Hydrastis.-A further advance in the American price to \$3.50 per lb. leaves the spot quotation unchanged at

163. per lb.

IPECACUANHA commands a fair amount of interest, with one broker still a seller of Matto Grosso at 7s. 6d.

KOLA is selling at previous low rates, including good bright Java halves at 21d. per lb. and dull African quarters at 2d.

LIME JUICE:-West Indian is quiet but firmly held at

from 2s. 6d. to 2s. 9d. per gallon for raw.

Menthol.—Although there is little evidence of actual rade buying, a considerable advance has taken place in the spot price owing to the manipulation of the market by speculators selling to one another. It is reported that ales of Kobayashi-Suzuki have been made between interested parties up to 39s. 6d. to 39s. per lb. on the

spot, and that it is the intention of those who control the largest stock to gradually force up the price to 45s per lb. To arrive, the sales include June-July shipment at 38s. to 38s. 6d. per lb. c.i.f. The United States seems to have given—a lead to this market as a succession of advances has taken place on that side lately culminating in a \$9.00 price, which however is still below the London parity. The subject is dealt with in our editorial columns. During the three months ended March the exports from Japan were as follows :-

		1921	1922	1923
To		Piculs	Piculs	Piculs
British India	• •	29	57	27
Great Britain		120	164	72
France	• •	- 5	9	30
Germany			5	33
United States		467	230	424
Other Countries	• •	13	18	37
Piculs	٠.	634	483	623
Value (Yen)		592,943	494,482	1,141,895

MERCURY.—There has not been a great deal of business doing, and no further inquiries of importance are reported for the Far East, including India. While the feeling seems on the whole rather firmer, due to the very moderate quantities available, quotations are rather wide. The figure of £10 12s. 6d. per bottle has been occasionally mentioned, but so far as can be gathered it is difficult to get hold of parcels thereat, while the nearest quotation on Wednesday was £10 15s., with certain dealers wanting £10 17s. 6d. for ready lots. Forward offers from the Continent are said to be but few for the present. The U.K. imports for May were 7,481 bottles, against *nil* for the same month last year, the aggregate for the five months being 21,872 bottles, against 5,276 bottles same period in 1922.

PLATINUM.—Business is being kept in narrow compass, chiefly in consequence of the dearth of offers, and the market rules firm at about £24 to £25 per oz., according to quantity. Raw metal is worth £21 Îos.

QUINCE SEED.—The exports from the Union of South Africa during 1922 amounted to 1,511 lb. (£286), against 2,520 lb. (£347) in 1921. Last year the United Kingdom received 654 lb. and the U.S.A. 857 lb., against 1,506 lb. and 1,014 lb. respectively in 1921.

RUBBER is unchanged and very little business is passing, especially in spot parcels. In spite of this there does not appear any inclination on the part of importers to realise; most of them are holding for 1s. 3d. per lb., although the market is almost a penny lower than this The feature of the week is the further reduction in home stocks. At the end of January, the London stock stood at 73,361 tons, whereas the present total is 51,503 tons, thus showing a decrease of 21,858 tons in the last five months—a substantial decrease. As a quantity of the present stock is already sold for American account, and a further quantity represent "off" grades, the amount of standard rubber actual here for free dealing is probably less than 30,000 tons. Quotations (Wedsmoked sheet, spot and June, 1s. 2½d,; July-September 1s. 2½d,; October-December, 1s. 3d.; January-March, 1s. 3½d. Balata is inclined to be steadier with more inquiry.

SENEGA is offered at 3s. 3d. per lb., at which the last business was done; c.i.f. offers of new crop at about 3s. per lb. have been received.

SHELLAC has been quiet throughout, the spot value of usual standard TN Orange quality closing at 280s. per cwt.; superfine is 300s. to 340s., AC cakey 295s., and GAL 250s. For delivery the sales include August at 257s. 6d. to 250s., and October at 247s. 6d, to 252s. 6d. per cwt.

STARCH PRODUCTS.—Farina is dull of sale with Japanese nominal. Dutch is 14s. spot and 13s. f.o.b. for June-July shipment. Rice starch crystals offer at 40s. for English and 34s. for Continental. Superior Dutch dextrin can be had at 22s., and No. 2 at 19s. Maize starch powder is 16s. 11d.

Tonka Beans.—It is very difficult to hear of supplies of Angostura, the first-hand market having been cleared.

Seeds, Spices, etc.

Arrowroot is firmer, St. Vincent offering at from $5\frac{3}{4}$ d. to $6\frac{1}{4}$ d. per lb. for fair manufacturing, and $6\frac{1}{2}$ d. to 7d. for grocery.

CANARY SEED is firmer in absence of offers of Morocco new crop and short supplies from the Plate. A revival of trade buying has taken place here. Mazagan 17s., and Larache 16s. per cwt. on the spot.

Larache 16s. per cwt. on the spot.

CLOVES have been steady, with rather more doing for forward shipment. Fair Zanzibar have been sold at from 11d. to 1s. per lb. on the spot. To arrive, the sales include March-May shipment at 1s. 05d. and May-July at 1s. 04d. to 1s. 02d. per lb. c.i.f., closing buyers on Wednesday at the higher price. The weekly wharf statistics show landings of 1,298 bales and deliveries of 271, leaving a stock of 18,117 bales, against 7,074 at the same period of 1922. the same period of 1922.

COCONUT (DESICCATED) is easier on the week, fine and edium offering at 43s. 6d. on the spot. To arrive, Maymedium offering at 43s. 6d. on the spot. June shipment is quoted at 40s. 3d. c.i.f., and June-July

at 3s. 9d. c.i.f.

FENUGREEK SEED is firmer at 23s. 6d. per cwt. on the

GINGER.—Several small parcels of Jamaica have arrived recently, and although there is no material alteration in prices, the market is not quite so strong; small is 160s. to 170s., and bold 180s. to 190s. Japanese is quoted at 70s., and Cochin at 80s. for washed rough.

HEMP SEED is firmer at 14s. per cwt. on the spot. NUTMEGS.—Small West Indian have been inquiry, and are now in short supply; 110's 9d., Singapore 110's 10½d., 80's 1s. 1½d., 65's 1s. 7½d. per lb. American buyers are said to be paying higher prices in producing centres. At auction 8 packages West Indian sold at 8d. for sound 110's to 97's, and shrivelled and wormy 125's at $5\frac{1}{2}$ d.

PEPPER is quiet with fair black Singapore offering at 4dd., and white Muntok at 6dd.

PIMENTO is slightly easier in the absence of support at $2\frac{1}{8}$ d, per lb. on the spot. The spot stock is 7,244 bales against 17,658 at this period last year.

Essential Oils

WITH the exception of cassia, Japanese mint, and citronella oils, there are few changes to report this week, although demand is fairly steady. Sicilian orange is dearer for shipment in the case of certain brands. Caraway oil new crop is about half the present spot price, but conflicting reports concerning the seed crop make it difficult for buyers to decide to place contracts.

The following are the quantities and values of the essential oils (other than turpentine) imported into and re-exported from Great Britain for May 1923, compared with the same month in 1921 and 1922, and for the five months ended May 31, 1921—

		1921.	1922.	1923.
than	lb.	153,299	248,807	365,544
	value	£35,562	£75,894	£109,646
do.	lb.	729,092	1,245,738	1,664,222
	value	£211,478	£342,304	£418,209
do.	lb.	27,490	55,793	93,242
	value	£11,142	£26,624	£51,586
s do.	1 lb.	209,860	355,634	399,796
	value	£119,065	£165,943	£170,699
	do. do.	do. lb. value do. lb. value do. lb. value do. lb. value do. lb.	than lb. 153.299 value £35,562 do. lb. 729,092 value £211,478 do. lb. 27,490 value £11,142 s do. lb. 209.860	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

ANISE (STAR).—"Red Ship" is quiet and unchanged at 1s. 10d. to 1s. 11d. per lb. on the spot; buyers at 1s. 9d. c.i.f.

BERGAMOT is quiet and unchanged at 11s. 3d. to 11s. 10d. per lb. c.i.f. for 37 to 39 l.a. as to brand. On the spot sellers quote 11s. 3d. to 12s. 3d.

CAMPHOR.—White essential in cases is offered at 80s. per cwt., drums at 77s. 6d.

The exports from Japan during March amounted to 2,069 piculs, valued at 50,500 yen. During the three months ended March 31 they were as follows:

1921 1923 23,453 Yen .. 62,922 90,397

CARAWAY. - According to recent reports the earliest date for delivery of new crop oil will be August. Speculators have entered the seed market, and it is said that the new crop has been practically all taken up. On the other hand, the report that the new seed crop would be large has induced buyers of oil to move cautiously in be large has induced buyers of oil to move cautiously in placing contracts, in spite of the advice from makers to buy at present rates. For August delivery crude is offered at 15s. per lb., and double rectified at 17s.

CASSIA.—The actual spot value is now difficult to determine; 12s. 6d. per lb. is mentioned in some quarters for 80 to 85 c.a. Sales have been made at 11s. 6d.

CINNAMON.—Ceylon leaf is quiet and on the easy side at 41d. to 41d. per oz. The price to arrive is 37d. c.i.f. CITRONELLA.—Ceylon is very firm and scarce at 3s. 8d. to 3s. 9d. per lb. on the spot. For shipment affoat 3s. 3d. c.i.f. is asked, but in some quarters much higher values are quoted. Java is dearer at 4s. to 4s. 0½d, per lb. spot. Business is reported at 3s. 10½d. c.i.f.

DILL.—East Indian oil has been sold on the spot at 16s. 6d. per lb.

EUCALYPTUS.—Further spot sales of 75 to 80 cineol have been made at 1s. 9d. per lb. Drums of 70 to 75 are quoted at 1s. $7\frac{1}{2}$ d. There has been a large number

of inquiries for the lower percentage oil recently.

GERANIUM.—Bourbon is steady on the spot at 29s. per
lb. Algerian June shipment is offered at 28s. 6d. landed.

For actual spot, 30s. and upwards is asked.

Lemon.—The price quoted for shipment is unchanged at from 2s. 9d. to 3s. per lb. c.i.f. The spot price is about 2s. 10d. to 3s. 2d., although there are sellers below this.

LEMONGRASS.—Cochin on the spot is quiet and steady at from $2\frac{1}{2}$ d. to $2\frac{1}{6}$ d. per oz., and $2\frac{1}{4}$ d. c.i.f. to arrive. Lime.—West Indian distilled is steady at 3s. $7\frac{1}{2}$ d. to

S. 9d. per lb. on the spot, according to packing; hand-pressed is unchanged at 7s. to 7s. 6d.

MINT.—Japanese dementholised Kobayashi-Suzuki is dearer at 7s. per lb. spot. The price to arrive is 6s. 9d.

c.i.f.

The exports from Japan during March amounted to 361 piculs, valued at 153,706 yen. During the three months ended March 31 they were as follows:—

1921 1922 524 144,738 213 Piculs 55,935 302,377

Orange.—The c.i.f. price of certain brands is dearer to arrive at from 13s. 3d. to 14s. per lb. On the spot there are sellers at 13s. to 14s. and upwards.

Palmarosa.—Sales have been made at 18s. 9d. per lb.,

and first-hand stocks are now cleared.

PATCHOULI has been in fair demand on the spot. There is a fair range of prices from about 27s. 6d. to 30s., according to quality.

PEPPERMINT.—Advices from the American producing districts intimate that weather conditions have been unfavourable to the growing plants, and that the crop will be later than usual. There is also a shortage of labour and wages remain high. Spot varies from 12s. 6d. to 13s. per lb. as to seller.

Aromatic and Synthetic Chemicals, etc.

Pharmaceutical Chemicals, etc.

THE lack of confidence in the steadiness of this market continues marked, and naturally business is decidedly poor. The latest and by far the biggest slump in the international value of the mark and the chaotic state of affairs in Germany makes any kind of business a matter of risk. Consumers are not purchasing an ounce of material more than is absolutely necessary for their immediate requirements and importers are in the same position. If it were possible—and it is doubtful—no one

thinks of buying for forward delivery.

ACETANILIDE is steady but meeting with very little business—spot holders quote from 1s. 6d. and upwards

per lb.

AMIDOPYRIN remains almost stagnant, with importers

quoting in the region of 14s. per lb.

ASPIRIN.—This is one of the few markets that is show-

ing any good business; spot prices are steady at about 3s. 3d. per lb. for good brands.

BARBITONE.—Most quotations are up to about 21s. per lb. for small lots, but at present there is little inquiry.

BENZOIC ACID is offering at 2s. 6d. per lb., but busi-

ness is lacking.

Betanaphthol (re-sublimed) is at last week's cheaper rate of 1s. 10d. per lb. with nothing doing; benzaldehyde .03 remains at 3s. per lb., and benzonaphthol is nominal

at 5s. per lb.

BROMIDES.—The spot position seems quite unsettled with offers at very low figures. Some of these at cheap rates are probably based on offers from Germany and are doubtful. At the same time matters are very unsatisfactory for all concerned, and business is a matter of negotiation. Ammonium is about 7_3^4 d. to 8_2^4 d. per lb.; potassium, crystals and granular, 7d. to 8_2^4 d. per lb.; sodium, crystals and granular, 7_2^4 d. to 8_2^4 d. per lb.

CALCIUM LACTATE remains dull with quoted rates for large lots at 1s. 8d. and 1s. 10d. for smaller quantities.

CHLORAL HYDRATE is steady, but there is not much business about—duty paid is offered at 4s. to 4s. 3d.

per lb.

CITRIC ACID, B.P.—Crystals are now steady with business limited. The spot offers are mostly from 1s. 82d. to 1s. 9d. per 1b., less 5 per cent., and the latter price is quoted for forward delivery.

CREOSOTE B.P.—The quoted rate remains at about

2s. 2d. per lb., with inquiry very light.
CREOSOTE CARBONATE is quoted at 8s. 6d. per lb., and at this rate the market seems quite steady.

GUAIACOL CARBONATE is offered at about 8s. 3d. to

8s. 6d. per lb., but seems to be of no interest.

Hexamine is offering on spot with firm holders unwilling to accept less than their quoted rates of 4s. to 4s. 3d. per lb.; not much business about.

Hydroquinone is perhaps a shade dearer with most quotations moving up to about 3s. 9d. per lb.

METHYL SALICYLATE is maintained steadily with the selling price fully at 2s. 6d. per lb. for quantities in carboys.

METHYL SULPHONAL shows no life. Dcalers continue

to quote at about 15s. per lb.

PARAFORMALDEHYDE.—Some business on small lines has been done with the selling price at about 3s. 9d. per lb.
PARALDEHYDE has been slow in moving off—the selling
price is in the region of 1s. 5d. to 1s. 7d. per lb., as to quantity.

PHENACETIN.—Dealers holding spot parcels continue to quote at or near 6s. 6d. per lb., but it is possible they might accept slightly less for good business.

PHENAZONE is now fairly steady, although not at all active. Dealers are asking about 7s. 6d. per lb.

PHENOLPHTHALEIN is fully maintained at 6s. 3d. to 6s. 6d. per lo. At these rates, which are based on Continental prices, there is little doing.

POTASSIUM PERMANGANATE B.P. keeps steady with a fair call on the market. Spot is worth from 10½d. to 11d. per lb.

11d. per lb.

RESORCIN has advanced a shade on offer at 5s. 9d. to 6s. per lb. Business has been slow.

SALICYLIC ACID.—Holders of spot supplies are asking about 2s. 3d. to 2s. 4d. per lb., as to quantity. Some inquiry has been on the market.

SALOL keeps well up to its former levels of 2s. 9d. to 3s. per lb., despite the lack of business.

SODIUM BENZOATE.—The spot price as quoted at about 2s. 6d. per lb. is more or less nominal. No record of

any business during the week from dealers.

Sodium diethylbarbiturate is steady as offered at about 18s. to 18s. 6d. per lb., but the market shows no

Interest.—The prices mentioned last week continue to obtain on spot with business on the small side. The market is steady. B.P. powder, 2s. 5d. to 2s. 7d.; crystals, 2s. 8d. to 2s. 10d.; phys. pure flake, 2s. 10d. to 3s. per lb., according to quantity.

Sulphonal is quoted in the region of 15s. per lb., but seems of no interest.

Industrial Chemicals, etc.

London, June 20.

"The markets in industrial chemicals continue dull" is the general report to hand this week. Quoted prices appear to be fairly well upheld, but there is rather a nervous undertone in many items. Some of the wood products are firm, owing to scarcity on spot. The continued fall in the German mark makes buying of products obtained from that quarter a sheer gamble.

ACETIC ACID is a good market, and at the moment there 80 per cent. pure, £50; 98 per cent. glacial, in casks, £60 (Canadian), in demijohas, £75 (Continental). At these rates the market is quite firm.

ACETONE.—British Government specification has been moving to higher rates for some weeks, and there is a further slight advance recorded with the price now firm at £119 per ton. The market seems likely to go still dearer, owing to shortage of spot supplies.

ALUM seems little wanted with dealers offering lump in casks at about £10 to £10 10s. per ton.

AMMONIUM (ANHYDROUS) has been occasionally inquired for with dealers quoting about 1s. 5½d. to 1s. 6d. per lb.

for 99.95 per cent.
ARSENIC.—So far as prompt delivery is concerned the market for white Cornish powder is very steady, due to the limited quantities available, but the demand is slow and chiefly confined to urgent needs, while the forward market remains very uncertain with a downward tendency. It is understood that good quantities have again been shipped to the United States in fulfilment of old

contracts. One hears that Japanese is again offering for forward shipment, but no reliable quotation can be obtained.

BLEACHING POWDER (35 to 37 per cent.) is a dull market with importers offering at about £10 per ton for

shipment.

COPPER-SULPHATE.—A somewhat more active demand has been experienced, not only for export but also for the home trade, and the undertone is steady. Quite good deliveries have been made lately again for shipment abroad in fulfilment of old contracts. Quotations are called fully £25 10s. to £27 f.o.b. for casks and £1 per ton less for bags. The May exports made a particularly good showing, amounting to 8,441 tons, which makes a total for the five months of 33,780 tons, compared with 30,381 tons for the same period last year.

CREAM OF TARTAR has been moderately active with Erson satts has been quite neglected with the price as offered at about £5 to £5 5s. per ton, in bags.

FORMALDEHYDE is firmer again, and there is now very

little on offer here. Fresh supplies are not likely to be brought in until the appeal case under the Safeguarding of Industries Act is decided. 40 per cent. volume, £93 per ton.

LEAD ACETATE continues very firm owing to shortage of supplies; brown, about £42; white crystals, £43 per ton. LITHARGE has been inquired for now and again with

dealers quoting at about £35 to £35 10s. per ton.

LITHOPONE is a good market with supplies still rather restricted both here and on the Continent; spot price is firm at £22 10s. to £23 per ton.

NICKEL SULPHATE.—British makers' prices are unchanged at £38 per ton for single and double salts for home and export, delivered and f.o.b.

POTASH CAUSTIC.—The spot market is not meeting with much business. The price is fairly steady at about £32 to £32 10s. per ton for 88 to 92 per cent.

POTASSIUM CARBONATE.—Business here continues very practical and purious caupat he said to be steady. 90 to

restricted, and prices cannot be said to be steady; 90 to 92 per cent., about £29 per ton; 96 to 98 per cent. is a little more in demand at about £32 10s. per ton.

POTASSIUM CHLORATE is level on the week, being quoted

at about 3d. per lb. on a dull market.

Potassium permanganate continues to be called for with commercial quality well maintained in the region of 10dd. per lb. according to quantity.

Potassium prussiate seems to be a little steadier at

the lower figure of 1s. 4d. per lb. quoted last week. There is, however, very little business about.

SAL AMMONIAC is freely offered on spot with buyers rather scarce; dog-tooth crystals, 49s. to 50s.; medium, about 43s.; fine white crystals, steadier after last week's

big drop to 27s. to 28s. per cwt.

SALTCAKE is well inquired for for export with makers offering restricted supplies at £5 for home trade and

about £5 10s. for export.

Sola Caustic.—Dealers' quotations are unchanged at: 70 to 72 per cent., £19 10s.; 76 to 77 per cent., £21 10s. per ton, ex wharf, shipping port. British makers continue to quote to domestic consumers on contract at £19 to £21 10s. per ton, in drums, carriage paid in the United Kingdom. Their prices for export vary as to destination.

SODIUM ACETATE is offered by dealers for shipment at

about £25 per ton.

SODIUM BICARBONATE from British makers for home trade only is quoted at £10 10s. per ton, in bags, carriage

paid in the United Kingdom.

SODIUM CARBONATE (washing crystals) from British makers is offered at £5 5s. per ton, in bags, for home trade only, carriage paid to destination. Dealers are offering at competitive rates.

SODIUM CHLORATE is the source of very little business; quoted rates are unchanged at about 27d, per lb. for

crystals or granular.

Sodium hyposulphite is fairly steady, and some business has been done with pea crystals in 1-cwt. kegs at about £15 10s. per ton and commercial quality, in casks, about £10 10s. per ton.

Sodium prussiate has not experienced any further decline in price from the level of 7d. per lb., but the

market remains very dull.

Sodium sulphide continues to be freely offered by dealers, who are finding business slow; 60 to 62 per cent. solid, £14 10s, to £15; ditto, broken, £15 5s. to £15 10s. per ton, in drums; 60 to 65 per cent. concentrated, £15

per ton, in casks.

COAL-TAR PRODUCTS, ETC .- Pitch, after the recent break in the market, has recovered a little and is much steadier. Otherwise this section is unchanged with business dull throughout. Aniline oil and Salt remain dull features with the quoted rates about 10d, to 11d, per lb., packages free. Betanaphthol is unaltered at 1s. 2d. per lb. with very little doing. Pitch, in London. to-day is quoted at the slightly better price of 122s. 6d. per ton. The tone of the market is also steadier. per ton. The tone of the market is also steadier. Methyl alcohol, pure, is firm with sellers asking fully £100 per ton and not much available. Carbolic-acid crystals are steadier but still flat at 1s. 4d. per lb. in large bulk packing. Creosote oil is well held at 10d. per gallon, naked, f.o.b. Cresylic acid is seldom called for; the quoted rate remains at about 2s. 3d. per gallon, drums extra. Pyridine is firm with very little about at 18s. per gallon on the spot. Hexamethylene on spot is quoted at 4s. to 4s. 3d. per gallon, with the market firmly held. Disinfectants are steady but in little demand at 3s. 9d. per gallon, Naphthalene is very steady with sales limited at about £20 per ton; crude, £7 to £13; crystals, £21; powder, £17 10s.; balls, £24; tablets, £28; candles, £28 per ton, packages free. free.

Fixed Oils, etc.

Fixed Oils, etc.

In the majority of products business has been very restricted in this market. A number of changes in prices showing advances and declines are recorded:—ACID OILS.—During the week this market has livened up and prices shown an all-round advance: coconut and palm-kernel, 38s.; groundnut, 38s.; soya, 36s., all spot. Castor OIL.—Hull prices are as given last week. Coconut oil has remained quiet, with prices about the same. Deodorised. English, spot, 51s.; Continental, 46s. 6d.; Ceylon, 45s. 6d. c.i.f.; Cochin, 48s. 6d. c.i.f., Cottonseed oil.—After the recent spell on inactivity and falling prices there is a much firmer tone here and an improvement in business; deodorised. 47s. 6d.; common edible, 45s. 6d.; soapmaking, 43s. 6d.; crude, 41s. 9d., all spot. Groundnut oil.—Continues quiet, with prices still unsteady and weak; deodorised. English, spot, 54s.; Continental, 51s.; crude Oriental, 46s., c.i.f. Linseed Oil (raw naked).—Business has been very limited during the past week. Quoted rates for all positions have during the past week. Quoted rates for all positions have moved within a very limited margin and the week closes with values a little easier. On spot 43s, 6d, July-

August, 40s. 9d.; September-December, about 39s.; Hull, on spot, 40s. 3d.; July-August, 39s. 6d.; September-December, 38s. Boiled linseed oil, naked, is steady at about 48s. ber, 30s. Solved inisect on, haked, is steady at about 40s. Palm-kernel oil.—At the rates now quoted this market seems to be very steady; deodorised, spot, 46s. 3d.; crude, spot, 41s. 3d. Palm oil.—Early on this market began to firm up with renewed activity, but the demand has since firm up with renewed activity, but the demand has since died down, with the market closing quietly steady. Lagos, 36s. 6d.; softs, 35s. 6d.; mediums, 36s.; hards, 37s.; bleached, 38s., all spot. RAPE OIL.—Prices are on about the same levels as last week, with the market quiet; refined, 47s.; crude, about 44s., all spot, in barrels. SOYA BEAN OIL.—Prices show a little appreciation here and the market is now steady; deodorised, 46s. 6d.; crude, 41s. 3d., all spot. Turpentime (American).—Business Las been slow and the market has been difficult to quote, and at the close was very irregular: on spot. about 94s. the close was very irregular; on spot, about 94s,; July-December, 74s. Total visible stocks have now been reduced to about 2,200 barrels of American spirit. The arrival from America of about 8,000 barrels referred to last week is in the course of discharge barrels referred to last week is in the course of discharge at this end, but there was a further reduction in the stocks in the meantime, the total being only 2,407 barrels (including 207 barrels of French spirit), this being the lowest return remembered from memory. The Savannah price has fluctuated between about 97c, and 99c,, and current supplies there have been moving off more freely. The next returns of stocks here should amount to over 9,000 barrels, Wood out.—Hankow in barrels on the spot is quoted at 100s, per cwt., which shows a further reduction.

OIL.—Hankow in barrels on the spot is quoted at 100s. per cwt., which shows a further reduction.

Lubricating mineral and burning oils, etc.—Business continues extremely dull in the majority of these products. Prices are, however, fairly well maintained, although many of them are not at all steady. Benzol remains dull, with makers quoting unchanged at 1s. 7d. per gallon, f.o.r. makers works, in buyers' packages. Burning oils.—Crude No. 3, 8½d.; No. 2, 8d. per gallon, barrels free; quoted rates are unchanged with the demand poor. Fuel oils.—995/910 gravity, £4 2s. 6d. per ton; 950 gravity, £3 10s. per ton, ex tank, no change. Solvent naphthas are slow of sale—quoted rates are so far maintained; 90/160, 1s. 5d., and heavy, 90/190, 1s. 4d. per gallon, drums extra. Naphtha is steadier after the recent declines, but the market is still dull; quoted at 1s. 6d. per gallon. Paraffin wax and scale.—Wax keeps well up to its level of 2½d. to 3d. per lb., in bags, according to melting point. Scale is quoted c.i.f. London at £15 7s. 6d., with business quiet. Petroleum oils.—American water white, 1s.; American prime white, 11d. per gallon, barrels free; Russian prime white kerosene, 6½d. to 7d., naked, ex tank; 7½d. buyers' barrels, filled free, and 10d. barrels, free, ex wharf, London. Petroleum fellies.—Snow white, £64; white B.P., £60; yellow, from £20 to £32; red yet., £20; ruby red, £21; dark stiff green, £13 7s. 6d., ex wharf, London. There is no change to record. Special oil, for Diesels and motors, 10d. per gallon, barrels free. White oils.—Special No. 1, £44; No. 1, £38; No. 1a, half-white, £33; drums free; No. 2, £27, barrels free. Market is quiet but steady. Lubricating oils.—Prices on spot are quoted at unaltered rates and the position generally is quite healthy. Pales, £10 15s. to £25; reds, £15 10s. to £25 10s.; dark cylinders, £15 to £29; filtered cylinders, £19 10s. to £32; blacks, £7 10s. to £15; all ex wharf, London, price fully maintained at £18 10s. per ton, less ½ per cent.

German Chemical Dividends

German Chemical Dividends

A NUMBER of German chemical works have now published their balance sheets for the past year, and the dividends to be distributed to the shareholders. The Badische Anilinund Sodafabrik A.G., in Ludwigshafen (recently occupied by the French), report a net profit of 3,906,444,842 (in 1921: 168,745,079) marks, ont of which a dividend of 300 per cent. (in 1921: 30 per cent.) will be paid. The total profits of the Farbenfabriken, formerly Friedrich Bayer and Co., in Leverkusen, aggregated 3,800,000,000 marks, and the dividend has been fixed at 0.60 gold mark on each share, corresponding to 3,000 paper marks. The Farbwerke, formerly Meister, Lucius and Brüing, in Hochest, on the Main (now in French occupation), are paying the same dividend, representing 300 per cent. (in 1921: 30 per cent.) on net profits, totalling 3,964,900,000 marks (in 1921: 175,800,000 marks). The Aktiengesellschaft für Anilinfabrikation in Berlin is also able to distribute the same dividend out of a net profit of 1,280,890,000 marks (in 1921: 63,500,000 marks). Gehe and Co. in Dresden are able to distribute 400 per cent, out of a net profit of 89,132,929 marks. NUMBER of German chemical works have now published



Letters for this section should be written on one side of the paper only. Correspondents may adopt an assumed name for purposes of publication, but must in all cases furnish their real name and address to the Editor.

The Hampstead Persecutions

SIR,—Every now and then we see cases coming before the courts making us wonder whether officials exist for the benefit of the community, or whether it is the other way about. Hampstead Police Court seems to be the favourite playground for ambitious officials. The most trivial cases are brought up there, for no apparent purpose except that of vexing honest folk. The summoned victim will probably spend half a day in the purlieus of the court before being called upon. When he is the case soon collapses from its own inanity. Perchance the magistrate lets off some caustic remark, but without awarding costs. That may be fun for the gallery, but not for the victimised party. A case in point is that of a chemist summoned for dispensing a bismuth-carbonate mixture. The frivolity of the charge was obvious. But why not make the frivolous officials pay costs? Is it because the chemist is a mere worm?

Faithfully yours,

F. C. Heron.

Ealing, W.3.

Eccentric Book-keeping

SIR,—I suppose a good many of your readers are accustomed to receive monthly statements made out after this style:—

Date.	Debit.	Credit.	Balance.
May, To Acct. rendered, 5, To goods	£ s. d. 14 17 6 6 14 9 4 1 3	£ s. d.	£ s. d.
" 18, By returns	1 17 9	14 6 14 17 6	
	27 11 3	15 12 0	11 19 3

I have never been able to understand this system. It seems to me to make a complicated and difficult account where it should be perfectly clear and simple, thus:—

May 5, To goods ,, 10 ,, 27 ,,	: <u>.</u>	••	••	£ 6 4 1	s. 14 1 17	d. 9 3 9	
Cr. ,, 18, By returns	••	••	••	12	13 14 19	9 6 -3	

Perhaps there is some obscure advantage which is not apparent to the ordinary individual. If so, will someone well up in such matters explain it to the uninitiated?

Yours faithfully,

Puzzled (18/6).

Night Calls

SR,—I probably have not had such a lengthy experience as "Veteran" (C. & D., April 7, p. 496), but I think I can equal, if not surpass, some of his night episodes. Cakes of soap and pots of vaseline were regular afterhour lines at one place, until I started charging double prices after 10 p.m., but some other incidents were worse than this. One lady rang me up on the telephone at 2 a.m. for a pound of cotton-wool, to be sent at once. I much regretted that I had a lot of trouble with errand boys, as they would insist on going home to sleep. Another titled customer rang me up after midnight to tell me he was sending his man round and would I attend to him quickly. When the man arrived, he wanted change for a sovereign to pay a cab fare. I think the limit was reached when the telephone rang at 3 a.m. and a voice

directed me to go round to Mr. Blank's house and tell him that his brother had to leave suddenly by the six o'clock train, and would he meet him at the station at 5.30? Some pharmacists make a rule of charging a night fee, which helps to eliminate unnecessary calls and can always be forgone in a legitimate case.

Yours truly, NIGHTMARE (10/4).

Friendly Societies and Doctors' Dispensing

SIR,—There are rumours to the effect that some Friendly Society officials desire that doctors should be paid an inclusive fee for advice and medicine. Is it possible to bring home to these misguided people the folly of such an arrangement? A doctor said to me recently: "Bismuth carbonate is very dear—too dear to dispense! Could I replace this with magnes, carb, and obtain the same result?" This doctor's fee is never less than 5s. a bottle. How much bismuth carbonate do the Friendly Society officials think insured patients would receive from this doctor under the arrangement they so unwisely advocate? The doctor prescribes it very freely for the panel patients under the present arrangement.—Yours, etc.,

INQUIRO (20/6).

Legal Queries

- J. A. G. (13/6).—Pil. hyd. perch. may be regarded as a preparation of corrosive sublimate and coming within Part 2 of the Poisons Schedule. The douche tablets containing 8.7 grains of hyd. perch. are in Part I. of the Poisons Schedule, and formalities governing the sale must be carried out.
- E. & S. (16/5).—Tr. nucis vom. and tr. belladonna are in Part II. of the Poisons Schedule, and do not require entering in the poison-book, nor need a doctor send a signed order. In future all drugs coming within Part I. of the Poisons Schedule must be on signed orders and be entered in the poison-book.
- D. M. G. (12/6) asks whether an assistant who pays income-tax must be insured under the National Insurance schemes. [The assistant must be insured unless he is employed "otherwise than by way of manual labour" at a salary exceeding £250 a year. If he has an independent income of £26 a year he is entitled to apply for exemption.]
- II. H. W. (12/6) has an apprentice, 16½ years of age, to whom he pays 7s. a week. Must "H. H. W." pay the whole of the weekly contribution due in respect of the lad for National Health and Unemployment Insurance? [The weekly contribution for Health Insurance is 10d., of which "H. H. W." and his apprentice must pay 5d. each. As regards Unemployment Insurance, as the lad is under 18 the weekly contribution is 9½d., of which "H. H. W." must pay 5d. and the apprentice 4½d.]

Tenant (11/6) wishes to obtain a renewal of his lease of a house and shop, the rent of which brings the premises within the scope of the Increase of Rent Act, 1920. The landlord wishes to double the present rent, while "Tenant" is willing to pay a 60 per cent. increase. "Tenant" has sub-let the residential portion of the premises. How does "Tenant" stand under the new-rent restriction provisions? Is he protected in any way, and can he demand a higher rent for the house? [Until the Rent Restriction Bill has been passed it is impossible to say how "Tenant" will be affected; it is probable, however, that no restriction as regards rent will apply in the case of a lease extending beyond June 24, 1925. The sub-tenant is entitled to the protection of the present Act, subject to any modification which may be introduced by the new statute, so that his rent must not be increased beyond a maximum of 40 per cent. above the standard rent, and to that extert only if "Tenant" is responsible for repairs.]

- F. H. R. (15/6).—A prescription for "dangerous" drugs must state the name and address of the patient.
 Where this is not done it is an order which you would be justified in supplying to the doctor's accredited agent. In the former case you must comply with the prescription regulations. In the alternative, enter the order in the poison-book, and in place of the signature write "Signed order." The order must be kept for two years. Place a cross reference in your dangerous drugs register.
- S. B. (15/6).—Sale of poisons by wholesale.—(1) A firm selling "dangerous" drugs wholesale must first be licensed before it can have possession of the drugs. The licence would cover both possession and sale. (2) In regard to Part I. poisons, there is no restriction on wholesale sales to retail dealers, save the one of labelling, etc. In view of the position of wholesalers under the new interpretation of Section 17 of the Pharmacy Act, new interpretation of Section 17 of the Pharmacy Act, it will be better in other cases for wholesalers to keep a poison-book and require signed orders from persons known to the vendor and write "Signed order" in the space provided for the signature. This latter provision specifically applies to veterinary surgeons. Orders are to be kept two years. (3) A limited company can carry on a wholesale business so long as an "one a wholesale and the surgest and the s on a wholesale business so long as an "open shop sale is not kept.

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

Sherwood (30/5).—Hopson's "General System of Chemistry" (1789) has no value.

H. C. C. (11/5).—Treatment of Alopecia.—A good deal of patience is required in treating alopecia areata. There are several recipes for alopecia in "Pharmaceutical Formulas," the following being two prescriptions useful for general practice:

Acidi lactici ... Olei ricini ... Aq. lavandulæ 31]. 388. Spt. rectificat. ad Misce.

This should be rubbed into the bald places, very gently at first, but more vigorously as the scalp gets accus-/ tomed to it.

Liq. ammon, fort. ... Chloroformi Зss. Ol. olivæ ... Spt. rosmarini Ess. ad Misce.

This also should be rubbed in cautiously until the scalp gets accustomed to the application. Ung. sulphuris and mercuric chloride (½ to 2 per cent. in S.V.R.) have their adherents, but the last must be used cautiously on large surfaces on account of the risk of absorption. Any general condition of ill-health apparent in the patient must of course be treated at the same time. It sometimes to course the same time. times takes a year or two before the hair grows again.

A. M. (20/5).—Uses of essential oils.—Oil of rue had a reputation as useful in flatulence, hysteria and amenorrhoa, the dose being from 2 to 5 drops on sugar. The medicinal properties of oil of sage are stimulant and aromatic. Oil of cedar is used in microscopy as a medium in which to examine tissues before mounting them permanently.

SACCHARIN (5/6).—MAYONNAISE DRESSING FOR SALADS.—

Olive oil 12 oz. Condensed milk 8 oz. Tarragon vinegar ... 3 oz. Eggs 1 dr. Salt Mustard 1 dr. ... ••• *** dr. Paprika Paprika ½ dr. Wine-vinegar ... to make into a cream.

Mix the eggs, the milk and the olive oil: the tarragon vinegar is mixed with the condiments and added a little at a time to the milk emulsion. The consistency is adjusted by adding wine-vinegar.

A. H. B. (6/6).—Oxygen-can be supplied by chemists Medical oxygen in the C. & D. Retail Price List is priced out at 10 ft. 6s., 20 ft. 8s., 40 ft. 13s. 6d., rent of cylinders 1s. a week, rent of fittings 1s. a week.

Kerin (9/5).—FACE LOTION.—The sample sent contains no solid matter beyond a small quantity of boric acid. Its specific gravity is 0.988, corresponding with about one-tenth its volume of 90 per cent. alcohol. It is perfumed mainly with neroli.

(23/5).—MINERAL DEPOSIT.—This sample of a white solid of smooth porcelain appearance is found to consist of practically pure aluminium silicate, containing only traces of zinc, magnesium and iron. Arsenic is practically, if not entirely, absent.

Acetanilid (11/6).—AQUA MIRABILIS is a term applied on the Continent to an aromatic water which is taken for internal pains. It is a water distilled from the herbs, but the following is an extempore form:

Cinnamon oil, Fennel oil, Lavender oil. Peppermint oil, Rosemary oil, Sage oil ... Spirit of each 1 part ... 350 parts Spirit ... Distilled water ... 644 parts

Mix.

J. D. (8/6).—Introducing a proprietary article.— J. D. (8/6).—Introducing a proprietary article.—The deciding factor in determining the price at which a proprietary article should be sold depends upon the need of the public. Thus the price of a similar article is a guiding factor. Some people may, and do, create a market for an ordinary article at a high price, but this is done by studying human nature and by advertisements of a "compelling" value. You should determine, not the amount you will spend a week, but what percentage of the selling price shall be allocated for the advertising. The more you can spend—judiciously—the better will be your sales. For example, if the net first cost of production is x, and you determine that 20 per cost of production is x, and you determine that 20 per cent. profit is required, your cost will be x+20 per cent. The retailers' profit is generally considered to be 25 per cent. and the wholesalers' $12\frac{1}{2}$ per cent., so that you have a figure x+20 per cent. +R. 25 per cent. + \parallel '. $12\frac{1}{2}$ per cent., to which must be added your own profit, which may well be another 25 per cent., giving you the selling price. If the public will buy freely at 33\frac{1}{3} per cent. or higher, there is no need to hesitate. A big turnover at 25 per cent, is better than a small one at 50 per cent., as the tendency is for the sales to grow since every sale should become an advertisement. out knowing the details we can only deal with the proposition in a general sense.

Retrospect of Fifty Years Ago

Reprinted from "The Chemist and Druggist," June 14, 1873.

Untrustworthy Customers

A subscriber writes:—"A lady brought the following prescription to be prepared, and told me she paid 1s, 6d for four times the quantity. As it bore the impress stamps for four times the quantity. As it fore the impress stamps of some other chemists, I wrote them all, five in number, with the following results:—

"Reply No. 1.—Charged for a single quantity, 1s. 6d.; for four quantities, 3s.

"Reply No. 2.—Charged for a single quantity, 1s. 6d.; for the case of the company of the compa

quantities, 3s. 6d.
Reply No. 4.—Gave no price, but simply a point blank denial of the assertion that 1s. 6d. had been paid for four

"Reply No. 5.—For three quantities, 2s. 6d.
"I think such barefaced attempts should be exposed, and therefore I ask you to be kind enough to insert this in order to put any of the trade on their guard."



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Special Advertising Offers to Retailers

(Operative in Great Britain and Ireland only)

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Descrip- tion of Case	Contents of Case	Costs you	Yields	Total Profit	PROFIT ON Selling Buying Price Price	PROFIT PER BOTTLE
Case A "B ", C	12 dozen 6 " 3 "	£16 0s. £8 2s. £4 4s.	£21 12s. £10 16s. £5 8s.	£5 12s. £2 14s. £1 4s.	26% 35% 25% 22½% 28½%	9½d. 9d. 8d.

1/9 SIZE (P.A.T.A.)

Descrip- tion of Case	Contents of Case	Costs you	Yields	Total Profit	PROFIT ON Selling Buying Price Price	PROFIT PER BOTTLE
Case D	18 dozen	£14 0s.	£18 18s.	£4 18s.	26% 35% 32½% 22½% 29½%	5½d.
" E	9 ,,	£7 2/6	£9 9s.	£2 6/6		5¼d.
" F	6 ,,	£4 17/6	£6 6s.	£1 8/6		4¾d.

COMBINED LOTS OF 3/- and 1/9 SIZES (P.A.T.A.)

Description of	Contents of Case	Costs you	Yields	Total Profit	Selling Buying Price	PROFIT PER BOTTLE on
	3/- Size & 1/9 Size					3/- Size 1/9 Size
Case G " H " K " L " M	6 doz. & 9 doz. 2 " "6 " 1 " "4 " 8 " "5 " 4 " "3 " 2 " ", 2 "	£14 18s. £7 8s. £4 12s. £14 9s. £7 15s. £4 7/6	£20 5s. £9 18s. £6 0s. £19 13s. £10 7s. £5 14s.	£5 7s. £2 10s. £1 8s. £5 4s. £2 12s. £1 6/8	26½% 36% 25½% 30½% 26½% 36% 25½% 36% 25½% 36% 25½% 30½%	9½d. 5½d. 9d. 5¼d. 8½d. 5d. 9½d. 5½d. 9d. 5½d. 8½d. 5d.

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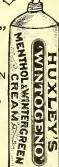
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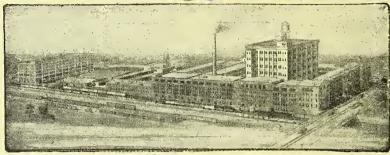
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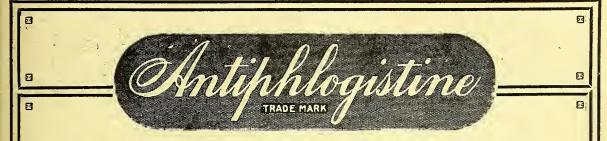
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Order through your Wholesaler.

Stocked by BLEASDALE,
LTD. (York) — SANGERS—
MAY ROBERTS—EDWARDS—RAIMES CLARK (Leith)—
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CHAS. ZIMMERMANN & CO. (Chem.), LTD. Ferrosan 9-10 St. Mary-At-Hill, London, E.C.3.



Trade Mark.

KNOWN ALL OVER THE WORLD AS THE STANDARD LIQUID PLASTER.

TRADE PRICES.

Retail Price. Trade Price.

10½d. Pocket Size... ... 8/5 doz.

2/- Medium Size 19/2 ,,

3/- Physician's Size 28/9½ ,,

£3 and up Carriage Paid.

Order through your wholesaler or direct

Sole Agent for British Isles and Colonies-

J. E. GARRATT, 96 Southwark Street, London, S.E.1.

BEECHAM'S PILLS

WHOLESALE PRICES.

Beecham's Pills:

Beecham's Cough Pills:

1s. 3d. size 10s. 6d. per doz. net. 26s. 6d.

Minimum quantity £5 value,

Packages FREE.

Carriage PAID.

CASH WITH ORDER.

Cheques to be made payable to THOMAS BEECHAM, and crossed "Westminster Bank, Ld., St. Helens."

Big Offer for Wisplays

Until further notice we are presenting absolutely free, with each display order, one dozen Glycola Shampoo powders for each

1 doz. 1/4 bottles of Glycola

2 doz. -/8 bottles of Glycola 1 doz. -/10½ tins of Health Salts.

Also usual 10% discount off m.w.p. Don't miss this profitable line of business.

GLYCOLA

is one of the best selling toilet preparations on the market. It is always in good demand and carries an Jexcellent margin of profit. Sell it and display it. It will pay you well. R.6

CHEMISTS' SUNDRIES PROOFED AND RUBBER GOODS BATHING REQUISITES HIRE DEPARTMENT

SPECIALITIES :-

TERCHLORIDE OF CARBON

The hay fever remedy with over 50 years' reputation.

DENTOL

A fragrant mouth-wash and gargle.

LAVENDER WATER

Made from an old and proved recipe of distinction.

LAXALINE

A gentle and efficacious purgative prescribed by many Doctors.

HOOPER & CO.

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TELEPHONE: REGENT 8066 (3 lines)
"SUPERABOUND, PICCY, LONDON."

Make HEADACHES help to fill your till-sell



ONSIDER "Daisy" from a thoroughly business-like point of view, the point of view you have got to have to be successful to-day—and you will see how wise you would be to push "Daisy" hard.

For "Daisy" yields you from 50 to 100 per cent. of clear profit; it is easy and quick to handle; the market is big and includes nearly everybody; and "Daisy" is advertised so heavily and so well that your every "headache" customer will accept it gladly.

Every day "Daisy" gets more and more users; more and more people learn how safe and how quickly effective it is. They are passing your window every hour. Let them see that you have "Daisy" and into your store they'll come.

Quick, easy, big-profit sales are what every chemist wants. "Daisy" offers them to you to-day. Will you take them?

-TERMS

1/- packets, each containing 8 powders—Minimum Retail price 1/-. Sample Powder 2d. For not less than 1 doz. boxes 9/9 per doz. For not less than 3 doz. boxes 9/2 per doz. 2/3 packets, each containing 20 powders—Minimum Retail price 2/3. For not less than 1 doz. boxes 21/6 per doz. For not less than 3 doz. boxes 20/6 per doz. Mixed orders for 1/-, 2/3, 6/- size and for "Daisy" Tablets on best terms. Discount 7½ per cent. for cash. Carriage Paid to destination. From all Wholesalers or direct.

<u>ការអស់ពេលពេលប្រជាជាប្រជាជិក្សា ប្រជាជាប្រជាជិក្សា ប្រជាជាប្រជាជិក្សា ប្រជាជាប្រជាជិក្សា ប្រជាជាប្រជាជិក្សា ប្រជាជិក្សា ប្រជាជិក្យ ប្រជាជិក្សា ប្រជាជិក្សា ប្រជាជិក្សា បាក្យជាជិក្សា បាក្យជាជិក្សា ប្រជាជិក្សា ប្រជាជិក្សា ប្រជាជិក្សា បាក្យជាជិក្សា បាក្យជាជិក្សា បាក្យជាជិក្សា បាក្យជាជិក្សា បាក្យជាជិក្សា បាក្យជាជិក្សា បាក្ស</u>

DAISY, LTD. - HOR

HORSFORTH

LEEDS

monument

Clarke's Blood Mixture

Special Terms for Window Show

Any Distributor ordering One Gross 3/- size Blood Mixture -or its equivalent in value—is offered an extra half-dozen Blood Mixture for 14 days' Window Show. DUMMIES AND SHOWCARDS ENCLOSED WITH EACH ORDER.

MINIMUM PRICE FACE VALUE

FREE CASES

 $33\frac{1}{3}$ per cent. on cost to our Distributors.

Carriage Paid on £100 orders.

Orders despatched in strict rotation.

The Lincoln & Midland Counties Drug Co. Ltd. PARK STREET, LINCOLN.



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To-day, as ever, the extra strength of

SUTTON'S CLOUDY AMMONIA



makes it the most efficient and the most economical for all purposes.

The enviable reputation of G.F.Sutton, Sons and Co. ensures that in handing out a "Sutton" product the retailer is giving his customer the finest quality. very Doesn't that mean "repeat" orders every time for YOU?

Sendforparticulars of FREE SPRING OFFER to

G. F. SUTTON, SONS & CO. Osborne Works, Brandon Rd. King's Cross, LONDON. N.7.

good name is more than riches

ALL CHEMISTS SHOULD STOCK

THE GOLD MEDAL HEALTH DRINK, Quick Seller. Big Profits. Over 40 years' Reputation.

"Abdine" is the most popular Health Drink, superior to all Mineral Waters. The Original and only genuine Fruit Drink.

Reduced Price List can be had on application.

DUNCAN McGLASHAN, LTD, ABDINE WORKS, WESTFIELD RD., EDINBURGH

INDIGESTION

Liberal Terms to Wholesalers and Retailers.

FAX, LTD., Manufacturing SALISBURY

FIKENY **PREPARATIONS**

On the P.A.T.A.

KOFF. A superior Cough Mixture. Originally prescribed by an eminent physician. 3/- per Bottle Retail. 25% Discount to Retailers.

INFANTISOP.

gripe, etc.
physician.
Retailers.

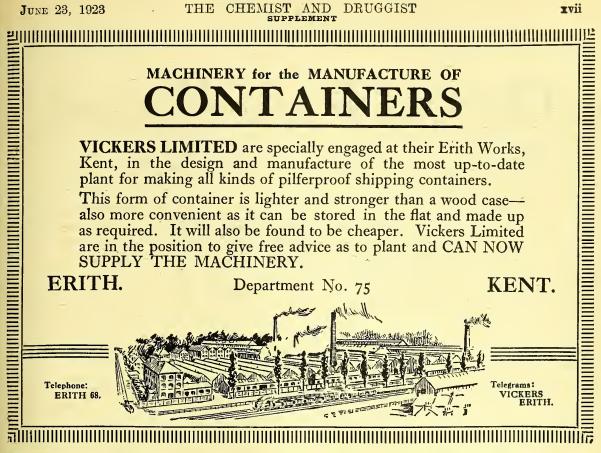
A soportific for babies suffering from
Originally prescribed by an eminent
2/~ per Bottle Retail. 25 % Discount to

FIKENY VANISHING CREAM. An excellent Toilet Preparation, 1/3 per Jar Retail. 33½% Discount to

Retailers.
Goods delivered Carriage Paid. The above goods are being advertised.

Apply to THE FIKENY STORES CO.
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The Names of Stockists will be inserted in local advertisements. ភាពលាលលោក បានប្រជាពលរបស់ មានប្រជាពលរបស់ មានប្រជាពលរបស់ មានប្រជាពលរបស់ មានប្រជាពលរបស់ មានប្រជាពលរបស់ មានប្រជាពល



The House for French Pharmaceutical Preparations

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LEAF REAL SILVER As supplied for many years to the leading Houses for Pills, Cachous, &c.

GOLD LEAF AND GOLD POWDERS WHOLESALE ONLY.

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Petroleum Jelly

White, Yellow, Amber, & Ruby Red, for Pharmaceutical Veterinary purposes

MEADE-KING, ROBINSON & CO., LTD. MANCHESTER LIVERPOOL LONDON

LIQUID PARAFFIN B.P. TOILET PARAFFIN BRILLIANTINES OLIVE OILS HONEY **EUCALYPTUS OIL**

Send your enquiries to

REDDGRAVE BUTLER & Co., Ltd. Park Lodge, Forest Lane, Stratford, London, E.15

SALVO

The Perfection of Petroleum Jelly

MANUFACTURED SOLELY BY THE DEE OIL COMPANY, Ltd.

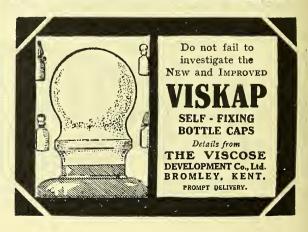
D 23/24, EXCHANGE BLDGS., LIVERPOOL, Telephone: Central 3859. Telegrams: "Cestrian Liverpool."

Packed in barrels, kegs and smaller packages according to requirements.

Other Grades PETROLEUM JELLIES, WHITE BASES, ETC

Samples and prices on application.

" OLEUM DEELINÆ," a certain cure for Eczema.



Make Money from the Summer OLIVE OIL demands

Order now from Goodall's handsome, well-packed Chemist's Line

Already—we write early in May—Goodall's cut quotations for Olive Oil have secured the season's heaviest buyers—men who are in a position to compare the prices of every packer in the country. And Goodall's have secured their orders.

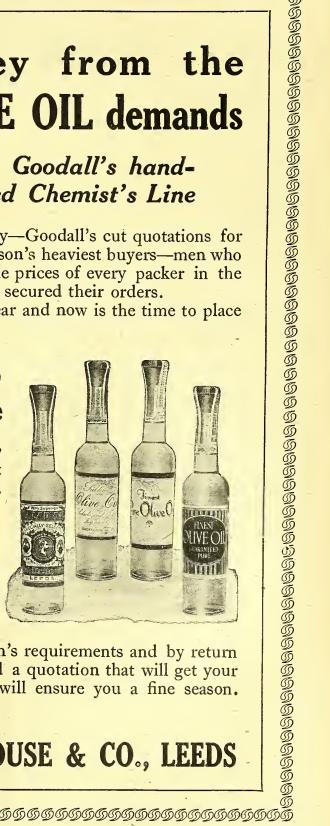
There is heavy demand this year and now is the time to place your order, but

Before you buy OILS Let GOODALL'S quote

That is the way—and the only way-to ensure buying the best of Oil at the keenest price.

> Our Name, your Name, or No-name Labels as you desire—all equally excellent

> WRITE for PRICES



stating your approximate season's requirements and by return will come specimen labels and a quotation that will get your business. A postcard to-day will ensure you a fine season. Will you send it, please?

GOODALL, BACKHOUSE & CO., LEEDS



Know the lowest current prices regularly

.... by means of our monthly price list.

Those who receive this list every month have at their finger-ends the lowest current prices at which the oils they need can be bought.

All qualities are in accordance with B.P. Standard requirements. Special manufacturing care ensures the minimum of variation.

Send a postcard for full details; your name will be added to the list of those who regularly have these useful lists. No obligation is entailed. Write now!

JAMES ARNOTT & SONS Ltd.

Head Office: 47 Pilgrim St., Newcastle-on-Tyne.



ADEPS LANÆ, P.B.

THE FINEST BRITISH LANOLINE PRODUCED

IS MANUFACTURED BY

THE PHARMACEUTICAL LANOLINE CO. Carnwath Road, Fulham, London, S.W.6.

Telephone: Putney 42,

WHO INVITE ENQUIRIES. Telegrams: "Batapo, Walgreen, London."

PETROLEUM JELLY.

Gough, Kidston & Co.

Chemical Manufacturers,
Tanning & Dyewood Materials & Extracts,
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Works: BERMONDSEY.

Tei. Add.: "Kidstonism, Eilgäte, London."

Tel. No.: Minories 2666 and 2667.

43/45 Gt. Tower Street, London, E.C. 3. Tel. No.: Hop 2029

cure

August 4, 1922.

Public Analyst's Report.

REPORT ON A SAMPLE OF LIQUID PARAFFIN MARKED E 870a.

Specific Gravity at 60° F - 892

Viscosity at 100° F (Red-wood No. 1 Viscometer) 265" Cloud Test - - - 15° F

The sample is colourless, transparent, odourless and tasteless, and has no fluorescence.

A mixture of four millilitres of the sample, two millilitres of absolute alcohol and two drops of a clear saturated solution of lead oxide in solution of sodium hydroxide, when kept at 70°C for ten minutes, remained colourless.

When three millilitres of the sample are heated with an equal volume of sulphuric acid in a test tube placed in boiling water for ten minutes with frequent shaking, the acid layer, after separation, is not darker than pale brown.

Ten millilitres of 90% alcohol when boiled with five millilitres of the sample are not acid to litmus.

The sample complies with the requirements of the British Pharmacopæia except in specific gravity, Signed ROBERT REDWOOD.

NOTE.

It will be perceived that the oil has a specific gravity of 892 and is therefore HIGHER than the B.P. standard.

STERNS

S.G. 890

High Viscosity.

Non-Clouding.

Wholesale Trade Only

STERNS LTD.

80 Royal London House, Finsbury Square, London, E.C 2.

Price alone is no indication of Value—Quality and Price are the determining factors



Above represents 3-lb. size decorated Tin. Samples and prices will prove to you that for real

ETROLEUM JELLIES

are unequalled.

A-big claim?

Yes; but our position as one of the largest importers of Petroleum Products enables us to substantiate it. Send a post card. "Specialty" Petroleum Jellies are supplied in barrels, free lever lid tins, and in various sized decorated tins.

ANGLO-AMERICAN OIL CO., LTD.

Telegrams:—
Nufinjol, Norwest, London."

Albert St., Camden Town, London, N.W.1.

Telephones:— Hampstead 4046 and 4047

W. PINDAR & CO. PILL MACHINERY (Hand and Power),

Haud Pill Machines (for Chemists), Tablet Sugar Coaters (with Hot-Air Blowers), Pill Coaters, Counters with Shoot, Tincture Presses, Emulsifying and Mixing Machines, Percolators, Ointment Mills, Drug Mills, "Eternite" Ovens, Tablet Compressing Machines, &c.

Other Machinery for Manufacturing Druggists and Chemists.

Cachet Filling Apparatus for French and Moorstadt Series.
Suppository and Pessary Moules, &c.

BROCKLEY LONDON, S.E.4. Telephone:

GILLETTE

U.S.A. 30/~ REDUCTION on QUANTITIES.

OF

VALET BLADES ... box for 35/-EVER-READY ... gross " 30/-CLEMAK (3 doz. packet) " 9/6 BARGAIN LIST.

LOUIS J. STAMBOIS (Dept. C), 34 Call Lane, LEEDS [20

IT PAYS TO STOCK THIS STROP

Every Safety user wants one Over 40,000 already sold.

This STROP has been extensively advertised in the National Press for some time, and a display in your windows will not fail to attract attention. There is a good demand for a Strop which will sharpen Safety Blades, and the MONKEY STROP "does the job." No adjustments—but reliable. The Strop SELLS at 33 per cent. PROFIT.

SAMPLES at Dozen Rate or SPECIAL OFFER.—6 Strops, packed complete with strutted Show Stand 21. cash with order, "DE LUXE" MODEL, in Nickel-Plated Case with Embossed Lid.
Selling Frice 5.6, Trade Price 45. per doz.

Manufacturers and Patentees-

DOUGLAS KIRBY & CO.,
Dept. M. Eastgate House, GLOUCESTER.

SHOWCARDS, LEAFLETS, AND PRESS WILL HELP YOU SELL IT Wholesale and Export Inquiries Invited. Orders Through Usua! Wholesaler



Just try to imagine a pane of glass with the flexibility of Tissue Paper and you have Cellophane—the only transparent wrapping material, absolutely air, grease and odour proof, tasteless and perfectly innocuous.

An ideal wrapping for Soap, Drugs, Tablets, Bath Crystals, Perfumery, Surgical Dressings, Sponges, Articles of Toilet, etc., etc.

Cellophane can be had in sheets, all sizes and colours; also in the shape of Bags, Discs, **Envelopes,** printed or not, allowing the contents to be seen by transparency.

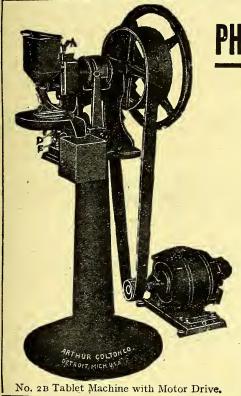
CELLO-DRESSINGS. The only sterilisable dressing unaffected by time, heat and moisture.

Agents Wanted where not represented.

Prices, Samples and Particulars from

The CELLOPHANE COMPANY

7, 8 & 9 Bird Street, LONDON, W.1.



PHARMACEUTICAL MACHINERY.

EFFICIENCY RELIABILITY **ECONOMY**

are the three most important points to bear in mind when you are purchasing, but you have the guarantee if you obtain from

THE ARTHUR COLTON CO... DETROIT, U.S.A.

Manufacturers of up-to-date Pill and Tablet Machinery, Collapsible Tube Fillers and Closers, etc.

SOLE BRITISH AGENTS:

& Sons. Ltd., KEMBLE STREET, KINGSWAY, LONDON, W.C.2.

PRICE LISTS ON APPLICATION.

PROTECT YOUR PRODUCTIONS. USE WAXED PAPER For WRAPPING POWDERS, DRUGS, SALTS, ETC. WATERPROOF PAPERS For LINING CASES, PARCELS, ETC. Sheets or Rolls. Actual Manufacturers: GEO. CHURCH & CO., Ltd. "Star" Mills, Nunhead Lane, S.E. 15.

ROBERTS' ORIGINAL PATENT TTLE-FILLING **MACHINES** cords for

Don't waste money on imitations, buy Roberts' Machines which actually Created the Re-

CLEANLINESS SIMPLICITY

and Rapidity in Bottle Filling.

> Write for new Price Lists.

NOTE the Address ; ROBERTS' PATENT FILLING MACHINE CO. 33 ROUNDCROFT ST. BOLTON.

"Alpha," price £14, will fill 10 gross bottles per hour.

Write for Particulars.
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THE **CHEMISTS** PRINTERS

Thomas Waide & Sons

Kirkstall Road, Leeds

ID DRUGGI 42 CANNON ST. LONDON E.C. 4 JUNE 23, 1923

This Supplement is inserted in every copy of The Chemist & Druggist.

WEEK'S SUPPLEMENT

In view of the enormous amount of detail work involved in the production of the Annual Special Issue, it must be put to press a day earlier than usual.

All advertisements intended, therefore, for the Coloured Supplement of June 30, must reach 42 Cannon St., London, E.C.4, not later than 5 p.m.

WEDNESDAY, JUNE

otherwise insertions cannot be guaranteed until the issue of the following week (July 7)

EMISTS' TRANSFERS,

Messrs. Orridge & Co., 56 Ludgate Hill, E.C.

May be consulted at their Offices on matters of Sale, Purchase and Valuation.

Suburb).-Welf-established (Good Residential Residential Suburi).—Well-established Business, situate in close proximity to railway station; returns between £2,500 and £2,750; scope for extension; well-fitted shop and residence; held on lease; terms, lease, and goodwill, £400; stock and fixtures by valuation.

2.—CITY (Near).—Old-established Business, situate in busy main thoroughfare; gross receipts exceed £5,000; lock-up Pharmacy; price £4,000.

3.—LONDON, S.W.—Cash Retail Business, with N.H.I. Dispensing, in working-class district; giving a net profit of £900 per annum; double-fronted shop, well stocked; Vendor's own property, which he desires to dispose of; 71 years' lease; sublet 22s, 6d. weekly; price, £2,250 with property, or £1,650 for Business only.

4.—KING'S CROSS (Near).—Cash Retail Business; very old-established; returns, present rate, £28 weekly; gross profit, one-third; price, about £750, or near offer would be considered

5.—ESSEX (Suburban).—Ready-money Business; capitally situate in busy main thoroughfare; returns, present rate, about \$20 weekly, with scope for increase; the shop is well fitted and fully stocked; modern residence; rent, £62; held on lease; price about £950.

6.—CAMBERWELL.—Ready-money Business; returns, present rate, £25 weekly; the shop has recently been partly refitted; small residence; rent £45; price £525.

7.—LONDON N. (Main Shopping Thoroughfare).—Cash Retail Business; returns, under management, between £40 and £50 weekly, at good prices: the premises are held on lease; net rent. £55 per annum; valuation terms, or lump sum offer entertained.

8.—SOUTH-EAST COAST (Within Easy Distance of).—General Retail Business, with good Optical connection; present hands 23 years; returns from Pharmacy, £2,000 per annum, and from Optical about £700 yearly; net profit on Optical, 60 per cent.; single-fronted lock-up shop, sight-testing room, and cellar; new

lease will be granted at £80 per annum, or freebold may be purchased; price to be arranged.

9.—SOUTH COAST.—Good-class Dispensing and Retail Business, with Kodak Agency; shop faces new estate of large houses in course of erection; returns, £50 weekly; large double-fronted shop, handsomely fitted and fully stocked; 21 years' lease; price to be arranged.

lease; price to be arranged.

10.—NORTH WALES (Health Resort).—General Retail and Dispensing Business, with little mixed trade; the business has been under management since it was established in 1895; returns last year £1,061, with scope for much increase; double-fronted shop, small living accommodation; rent £25 per annum; held on lease; price £750 or near offer entertained.

11.—WILTS.—Working Partnership offered in two Businesses, capable of much extension with additional help; the half share would produce an income of about £700 per annum; both concerns are entirely unopposed; the investment is suitable to a young man with energy; price £1,500; further details on application.

12.—SOUTH COAST.—Good middle-class Retail and Dispensing

12.—SOUTH COAST.—Good middle-class Retail and Dispensing Business, with Kodak Agency; returns, between £1,800 and £2,000 yearly; shop is fairly fitted and stocked; there is a residence; rent £70 per annum; held on lease; price about £1,000.

£1,000.

13.—EAST COAST.—Good-class Cash Retail, with Photographic and Optical; returns average £2,000 per annum; gross profit, 40 per cent.; double-fronted shop, handsomely fitted in mahogany; fully stocked; good living accommodation, with bathroom, long garden with vines, garage; Vendor's own property, which must be sold with the business; price £3,200.

14.—DORSET (Near Coast).—Middle-class Cash Retail Business; returns at the rate of £1,250 per annum, at usual prices; single-fronted shop, fairly fitted and well stocked; no living accommodation; rent, £60; low rates; beld on lease; price £600 cash.

Messrs. O. & Co. desi.e to emphasize the necessity of a per odical statement of Account by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the abour of Stocktaking and Valuation it is often omitted and exentually becomes the cause of confusion and loss.

Valuations for Stocktaking

Messrs, O. & Co. are prepared to undertake these essential duties and make Special Terms for such services

ORRIDGE HILL. LONDON, CO., 56 LUDGATE

BERDOE & FISH

Valuers and Transfer Agents, 41 Argyle Square, KING'S CROSS, W.C.1.

(One minute from St. Pancras and King's Cross Stations.)

(One minute from St. Pancras and King's Cross Stations.)

1.—EAST COAST.—Good-class Cash Business, in central position of busy town; returns £2,000; plenty of scope; handsome modern pharmacy and excellent living accommedation; price, with property, £3,200, mortgage can be arrauged.

2.—DEVON.—Medium-class Cash Retail, in large town; returns over £1,100; net profit about £350; moderate rent, on long lease; good house attached; double-fronted shop, well stocked; price £750.

3.—KENT (50 Miles Out).—£650, or close offer, secures a thorough genuine business; practically unopposed; returns, about £25 weekly; very profitable; rent, £40, on lease; 7-roomed house, excellent stock.

4.—LONDON, W.—Good-class Business, in excellent position; present returns £40 a week; scope for doing dcuble in smart hands; large double-fronted shop; splendid windows; good stock; price for quick sale £1,000 cash.

5.—LONDON, E.—Genuine Cash Drug Store, with Kodak Agency; returns £1,700; good opening for N.H.I.; practically unopposed; 8-roomed house; lease granted; well stocked; price £900 cash; recommended.

TO INTENDING VENDORS

SPECIAL NOTICE,-Having a very large number of genuine buyers seeking businesses, from £800 to £3,000, in all parts, especially Home and Southern Counties, South Coast and Midlands, we are able to effect speedy sales without any publicity, and cordially invite correspondence and applications for our terms. Also a superior business is required for a client with £4,000 cash at command,

STOCKTAKING VALUATIONS.

We are now booking dates for July and August at special reduced terms and invite early applications.

ESTABLISHED 1870. Telephone: 651 Museum.

The Association of Mnfg. Chemists

Head Offices-26-28 Kimberley House, Holborn Viaduct, London, E.C.1 (and at 2 Bixteth Street, Liverpool) PARKIN S, BOOTH, Accountant and Valuer. PHONE: CITY 6942-43.

WE HAVE THE FOLLOWING BUSINESSES FOR DISPOSAL.

1.—DORSET.—Recently-established Cash Retail Business; returns at rate of £1,250; lock-up shop, situate on main road between Bournemouth and Poole. No near epposition. Premises held on lease, 14 years. Rent £60. Well stocked. Price for immediate sale, £600.

2.—LONDON, N.—Good Retail Business, taking £1,500 per annum; well-stocked and fitted; little opposition. Two good living rooms; 7 years' lease, with rent, £52 per annum; inclusive price, £950.

3.—GOLDERS GREEN.—Fincly situated Portrait Studios and Photographic Business; lease 8½ years, at £175 per annum; premises consist of basement, double-fronted shop, and 3 floors above. Full particulars on application to this office.

4.—OLD KENT ROAD, S.E.—Retail Cash Business; well situated; premises held on lease—4 years at £75; premises sublet at £50; turnover, approx. £25; full particulars on application.

5.—SOUTHAMPTON.—Well-established Chemist and Druggist's Business, situate in suburbs; good scope for N.H.I.; very little opposition; nice, commodious premises; property can be acquired; stock and fixtures about £350; full particulars on application.

6.—WANTED.—North of Eugland, or East or West Coast, Retail Chemist and Druggist's Business, with furnover £2,500-£3,000 per annum; or would cutertain neglected Business if scope for development; capital available, £1,500. Fullest particulars to this office.

STOCKTAKING.—Now is the time to take your stock. Perhaps it is too much trouble or you have not the time to spare. Then why not consult the Practical Firm who will do this work for you for a small inclusive fee, without interference with your work? For full particulars write as above.

FREDK. H. RICHARDS

Expert Chemists' Valuer, Transfer Agent & Stocktaker

LONDON.—Wholesale Toilet and Perfumery Business for Sale; price £1,350, or would entertain partnership. BANKS OF THAMES.—Nice Corner Shon; low rent; handsomely fitted; scope for great increase; price £550

nandsomery man, the for quick sale.

LONDON SUBURB.—Lock-up and parlour in busy main thoroughfare; returns about £1,000; long lease; price £600, cr offer.

Businesses Wanted, £300 to £3,000. Bona-fide clients waiting.

Lowest Terms for Stocktaking and Valuations. Recommended by leading Wholesale Houses.

8. CHICHESTER HOUSE, CHANCERY LANE, W.C.2 'Phone: HOLBORN 598,

ERNEST J. GEORGE

Chemists' Valuer and Transfer Agent. INCOME TAX SPECIALIST.

WRITE FOR SPECIAL AND INCLUSIVE TERMS For Stocktaking and Preparation of Accounts.

3 ST. PAUL'S CLOSE, WALSALL.

Tel. 774

THOS. TOMLINSON &

CHEMISTS' VALUERS, TRANSFER AGENTS, AND EXPERT STOCKTAKERS,

45a MARKET STREET, MANCHESTER. ESTABLISHED OVER HALF A CENTURY, Telegraphic Address: "Tomtom."

BUSINESSES WANTED.

BIRMINGHAM SUBURB.—General Retail and Dispens
Business required. In reply please state annual retur
gross and net profits for last three years respectively and pr
111/40, Office of this Paper.

A DVERTISER requires substantial Business in heal locality; one situated in main thoroughfare preferred; cavailable. Full particulars, in confidence, to 110/26, Office this Parce. this Paper.

CENUINE Business required for cash, well established, w returns £2,000.£3,000, with Wine Licence and Phegraphic preferred; Pharmacists intending retiring, easing off responsibilities of their business, or desiring larger cospecially asked to communicate (confidential); references as Hughes, Chemist, Brunswick Street, Nelson.

PHARMACEUTICAL Chemist requires good Business caps being worked by two qualified persons; would enter Working Partnership in large business with view to ultime purchase; good house accommodation required. Reply "Ph.C." 83 West Street, St. Philip's, Bristol. Will advert kindly send full name to this office?

WANTED, good-class Business with living accommodat returns about £4,000; cash waiting. Description premises, rent and full particulars, in confidence, Brice, The E whitehall Road, Celwyn Bay.

PARTNERSHIPS.

A MALGAMATION.—Director required willing to in £1,500 and take half share; Wholesale; returns a £7,000; chiefly Toilet Articles and Sundries. 27/864, Office half share and Sundries. this Paper.

DENTAL Chemist, with good Dispensing Business (Nort Counties), wishes Partner (lady preferred, Minor exa C.A. report on business; qualification £600. Apply 108 Office of this Paper.

HALF share in Wholesale Sundry and Toilets; director 1 ing will sell much below value; great opportunity geutleman up in foreign buying; about £700. Write 27/Office of this Paper.

BUSINESSES FOR DISPOSAL.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

BLACKPOOL, N.S. — Old-established Dispensing Business; lock-up; satisfactory reasons for disposing; best position; tully stocked; price £1,050 for quick sale. Apply, stamped envelope, "R. W.," 34a Victoria Street, Blackpool.

POLTON (near).—A splendid opportunity occurs to acquire a really sound Chemist's Business with Wine Licence attached; doing good turnover; very profitable trade; nicely fitted, well stocked, corner premises, with living accommodation and immediate possession; £1,000 required. Particulars, stamped envelope. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester.

CHESTER.—For Sale by private treaty, old-established Free-hold Chemist's Shop in main thoroughfare, with good living accommodation, together with the excellent shop fixtures, stock and effects; bargain price for a quick sale. Apply, F. W. Wragge, Auctioneer and Valuer, 3 Woodlands Road, Hough Green, Chester.

CHESTER.—Premises and Goodwill of old-established Chemist's Business for Sale, situate in centre of city; good living accommodation; immediate possession. Apply Harrison, Estate Agent, Westminster Buildings, Wrexham.

KENT.—Good Family Retail and Dispensing Business; returns £3,000, with scope for large increase under modern management; net profit £800; there is good living accommodation; long lease; low rent; price £2,250, cash down; no offers. 27/861, Office of this Paper.

ONDON, E.2.—Herbalist and Drug Stores in busy market thoroughfare; lock-up shoo; electric light; trade average £10; good working-class district; plenty of scope; short lease, optional renewal; rent £26 inclusive; stock about £120; price £260 quick sale; genuine reasons for disposal. "Bargain," 89 Comber Grove, Camberwell, S.E.

ONDON, EAST SUBURB.—Drug Store; takings average £9 week under unqualified manager; would double under personal management; rent £55; 7.14-21 years' lease; shop and parlour vacant, other rooms let off; price £225 cash, or £125 down and £125 by instalments. Apply 27/865, Office of this Paper.

MANCHESTER.—Chemist's (Wholesale) Proprietary Business M for Sale as a going concern, including good proprietary lines, stock, fixtures, goodwill, etc.; suitable for one or two enterprising gentlemen, not necessarily qualified; the price asked is £275 inclusive; or nearest offer. Please reply 109/39, Office of this Paper.

MIDLAND TOWN—Retail and Dispensing Business for Sale, three minutes from market place; average returns about \$6700; scope for Photographics; lock-up shop; price £450. 111/25, Office of this Paper.

SOUTHBOURNE, BOURNEMOUTH.—Unique opportunity; growing suburb; no opposition; opening sacrificed by owner's illness; new premises; shop and modern house; freehold; new fittings; stock; price £1,620, or offers. 110/3, Office of this

SOUTHERN COUNTY.—Returns average over £1,000; Rexall and Kodak Agencies; little N.H.I.; top prices; low expenses; close to large permanent military camps; nearest opposition 3 miles; stock and fittings valued £350; price £450; Partnership with view to early succession considered. Stamp for reply. 106/18, Office of this Paper.

OUTH Seaside Health Resort.—Dispensing Store Pharmacy, main road, important central position; unlimited scope for increased business; elaborately fitted; extensive modern stock; no near store opposition; splendid investment; established six months; returns at rate £2,600 per annum; season commencing; long duration; imposing large lock-up shop; £3,000 or reasonable offer. 108/22, Office of this Paper.

SOUTH WALES (Colliery and Works District).—An old-established Mixed Chemist's Business; unopposed; in present hands over 50 years; owner retiring; spacious 3-front corner shop, large house and garden, warehouse, and basement stores; lease granted; Gilbey's Wine and Spirit Agency; average returns £3,387; cash price £1,800; investigation invited. 111/9, Office of this Paper.

AN opportunity occurs of acquiring first-rate Suburban Business, good class, in best town in North of England; good-class population of about 8,000 people; no opposition; large sale own proprietaries; turnover last year £3,000; rather less this year because of depression, about £2,500; beautifully fitted; price £1,700 for goodwill, fixtures, utensils and stock; property must also be bought, £1,300; reason for sale, illness in family. "Ajax," 108/21, Office of this Paper.

IMPORTANT Midland city.—Old-established, neglected Chemist's Business in thickly populated working and middle-class district; opposition nominal; general Drug, Disponsing; opening for N.H.I., Optical and Dental; cash trade; commodious shop; long lease; excellent opportunity for pushing man; easy lease, fair stock, fittings, £600. 105/26, Office of this Paper.

THE Proprictors of British Patent No. 15,403 of 1912, relating to "Coagulated Emulsion of Cod Liver Oil or the like with a palatable preservative coating and method of producing the same," desire to enter into negotiations with one or more firms in Great Britain for the Sale of the Patent Rights or for the grant of Licences to Manufacture under royalty. Inquiries to be addressed to D. Young & Co., 11 and 12 Southampton Buildings, London, W.C.2, Chartered Patent Agents Agents.

SALES BY AUCTION.

Re W. P. Rookes in Bankruptcy. By Order of the Trustee. EASTLEIGH.

EASTLEIGH.

NOTICE of Sale by Public Auction of the well-placed Long Leasehold BUSINESS PREMISES known as 10 STATION HILL, EASTLEIGH, situate quite close to the Railway Station and the Southern Railway Works, together with the FIXTURES, FITTINGS AND GOODWILL OF THE BUSINESS OF A CHEMIST, which business has been established for over 35 years. A portion of the dwelling accommodation is let on a weekly tenancy, but VACANT POSSESSION of the Shop and sitting room behind shop will be given on completion of the purchase. The property is leasehold for the unexpired term of over 900 years at the annual Ground Rent of £3.

SCAMMELL & SMITH

SCAMMELL & SMITH
will offer the above for Sale by Public Auction at the Junction
Hotel, Eastleigh, on Thursday, July 5, 1923, at 7 o'clock in
the evening.

Postial

Particulars of Sale of the Solicitors, Messrs. Goater & Blatch, Scuthampton; the Trustee, P. S. Booth, Esq., 14 Holborn Viaduct, London, E.C.; or of the Auctioneers, Station Hill, Eastleigh.

FOR SALE.

BOTTLES.-15 gross 2½ oz. flat panelled Bottles, 5 gross cases, free on rail, £3 2s. 6d.; sample posted 3d. Albert Hagon, Ltd., Bute Street, Cardiff.

AGENCIES.

RISH Representation.—Advertiser, representing London house, established connection Chemists, Hospitals, Doctors, etc., desires Agency; Proprietaries preferred but not essential; office, warehouse, distributive facilities, and substantial returns guaranteed firm appreciating services rendered; would act as distributor for firms wishing to economise on freight; correspondence invited. 110/18, Office of this Paper.

FINANCIAL,

WANTED, one hundred Chemists to invest ten pounds each, on a profit-sharing basis, in an established Wholesale business; there are great possibilities behind this in the coming winter's trade; a minimum of ten per cent. guaranteed, with reasonable security for your money. 105/34, Office of this reason: Paper.

SITUATIONS OPEN.

[HOME.]

RETAIL.

DOURNEMOUTH.—Wanted, a qualified Assistant (male) with good practical knowledge of Dispensing; permanency. Apply, with particulars of experience, age, salary required, enclosing a recent photograph, to J. K. Matterson, The Arcade, Bournemouth.

PRIXTON.—Smart Assistant as Senior, about 35; married preferred; good Salesman, Window-dresser, Photography and Disponsing; must have tip-top references. Rees, Chemists, Loughboro' Junction, S.W.9. Applications not answered in four days declined with thanks.

CROYDON DISTRICT.—Junior Assistant, 20-28, male, for Counter, Dispensing and Photographic. Apply, stating salary, etc., to 111/1, Office of this Paper.

DEAL.—Competent Assistant required at once for first-class Retail and Photographic Business. Full particulars to Stewart Dunn and Son, High Street.

EAST Coast Seaside Resort.—Assistant wanted at once for season; good Dispenser. State age, height, salary (indoors or outdoors), names of two last employers, 112/3, Office of this

FELIX STOWE.—Immediately, for scason, capable Assistant with good all-round experience, chiefly for Dispensing. Please give particulars of experience, age, salary required, ctc., to H. F. Douthwaite, Pharmaceutical Chemist, Felixstowe.

HULL.—Improver required in August, lady or gentleman, reliable Dispenser with knowledge of Photography; permanency. State salary required (ontdoors) and usual particulars. F. C. Page, M.P.S. (late T. H. Good), 341 Beverley Road, Hull.

KIDDERMINSTER.—Dispenser required by Medical Association; must either have M.P.S. qualification or have had at lease three years' experience previous to 1911 (with Doctor or Public Institution). Address, with full particulars and salary required, to Secretary, 159 Offmore Road, Kidderminster, not later than 29th of June.

I ANCASHIRE, Preston District.—Young lady Assistant required; must be a capable Dispenser. State age, experience, and salary required: "Preston," 110/251, Office of this Paper.

LIVERPOOL.—Smart, competent Assistant (male), unqualified, wanted for city business. Particulars to "Chemists," c/o Mr. MacLennan, 11 Drury Lane, Liverpool.

LONDON, E.C.—Qualified Junior wanted in City business, used to Retail and Dispensing Counters. When sending particulars of qualifications, experience, salary required, etc., please not to enclose photo, testimonials, or stamps. Apply P.C.B. 44/36, Office of this Paper.

I ONDON, S.W.-Qualified Assistant wanted for good-class Dispensing business. Apply, giving particulars of experience and salary required, Cane, 10 Gloucester Road, S.W.7.

I ONDON, S.W.—Junior Assistant wanted; must be able to undertake D. and P. work. Apply by letter, stating previous experience and salary required, to Wilkie, 28 Hildreth Street, Balham.

LONDON, S.W.—Wanted, a competent unqualified Assistant for modern good-class Store trade, about 30, of good appearance and address; must be a first-class Salesman and Window-dresser. State age, height, experience, and salary required in first letter to 111/10, Office of this Paper.

ONDON, W.—Capable and energetic Assistant required, chiefly for Dispensing, in high-class West-End Pharmacy; room provided. Apply, giving full particulars of age, experience, and salary required, and arranging interview, to Potts & Rees, 62 South Audley Street, Grosvenor Square, W.1.

TONDON, W.—Assistant wanted, unqualified, accustomed to first-class business; West-End experience and knowledge of French preferred. Apply, The Manager, Heppells, 26 Piccadilly, W.

NORTH-EAST YORKSHIRE.—Qualified lady wanted for good-class Retail business. Full particulars and salary required to 109/22, Office of this Paper.

OXTED, SURREY.—Well-educated qualified Assistant required for high-class business in residential area; under 35; July 15; also Junior for Photographic and Stock; accustomed to D. and P., required at once. J. S. Sumner, 327 Brightou Road, South Croydon.

SCARBOROUGH. CARBOROUGH.—Young male Assistant (season engagement) for Photographic Workroom and Counter. State age, salary, experience, and qualifications (if any) to Whitfield & Son, 6 Filey Road, Scarborough.

WORKS., WEST RIDING.—Qualified Assistant for Light Retail and Photographic business; must have a good personality and a varied experience; age about 25. State experience and salary required; photo if possible. 110/38, Office of this Paper.

A "LOCUM Tenens" Assistant-Dispenser is required at the Battersca Provident Dispensary, July 16 to August 4, and August 13 to September 1; evenings only, 5.30 to 8.30; salary 2 guineas weekly. Apply, by letter only, Mr. Hogg, 185 High Street, Battersea, London, S.W.

A QUALIFIED Manager wanted at once, siugle; permanency for a good man; must be a good Dispenser and Counterman.—Apply, giving full particulars of experience, references, salary required, to G. A. Pickering & Son, Chemists, Royston, Barnsley.

A QUALIFIED Assistant in a West-End Retail and Dispensing business, with Photography; must be courteous, punctual, we'll up in his work, and character must bear the strictest investigation. State details of previous experience, with references, salary required (outdoors); previous West-End experience and Window-dressing abilities essential. 110/37, Office of this Paper.

METROPOLITAN BOROUGH OF WOOLWICH.

TUBERCULOSIS SERVICE.

APPOINTMENT OF CLERK-DISPENSER.

APPLICATIONS are invited for the position of Clerk-Dispenser at the Woolwich Tuberculosis Dispensary.

The person appointed must be a qualified Dispenser, and will be required to carry out the whole of the dispensing work of the Dispensary and to keep the necessary records and accounts relating thereto. Experience in general office work is essential. A knowledge of Shorthand and Typewriting will be considered additional qualifications.

Salary £110 per annum, together with bonus in accordance with the Award of the Civil Service National Whittey Council Cest of Living Committee. The salary with present bonus amounts to £189 18s. per annum.

Applications in candidate's own handwriting, stating age, experience and present employment, and accompanied by copies of not more than three recent testimonials, to be sent to the nudersigned not later than 12 noon on Wednesday, 4th July, 1923, endorsed "Clerk-Dispenser."

Selected candidates only will be notified of the appointment when made.

By Order,
ARTHUR B. BRYCESON,
Town Clerk.

Town Hall, Woolwich, S.E.18. June, 1923.

A SMART qualified man required, London, company shop, view to future management; some Counter experience. Lowest salary, etc., to 111/8, Office of this Paper.

SMART gentlemanly Assistant of good address; age about A 30; quick at Counter and an accurate Dispenser; energetic; knowledge of Photographic work; tactful and obliging with customers, and a good Window-dresser; undeniable references essential; salary to commence with £4 per week (out doors). Apply, giving full particulars, and enclosing photograph if possible, to L. North, Tillingham, Weston Road, North

A SSISTANT wanted, Junior or lady; must be a good Dis penser; some knowledge of Photography an advantage Please state particulars of experience and salary required. H Amon, Chemist, 436 High Road, Streatham, S.W.16.

A SSISTANT required, age from 27 to 35; must be accurate Dispenser, smart Salesman and Window-dresser, preferably with a knowledge of Photography; highest references essential—Apply by letter only, stating age, height, salary required (out doors), and previous experience, to C. R. Gaulter, 41 Devonshir Road, Blackpool.

A SSISTANT, male, unqualified, for good-class suburban busi ness, Epping Forest direction, 7 miles City; accurate Dispenser and smart Salesman essential. Applications unanswere 7 days respectfully declined. State age, salary, and names o all former employers with length of service. Matthews & Son 722 High Road, Leytonstone, E.11.

A SSISTANT required, age from 25 to 30; must be accurat Dispenser, smart Salesman and Window-dresser, with Photographic knowledge. Apply by letter, giving full particulars to 27/856, Office of this Paper.

A SSISTANT required for season, high-class Pharmacy Esse, coast; must be good Counterman and capable Photographi Salesman. Full particulars first letter. 111/16, Office of thi

CHEMIST, qualified, wanted as Branch Manager; goo Counterman, with knowledge of Photography; must hav undeniable references. Send full particulars, with photo, an state salary required (outdoors), to Barkers, Chemists, Grimsby

CHEMIST-OPTICIAN, qualified both branches, wanted fo high-class provincial business; liberal salary; excellen prospects for an energetic business man; practical experience salesmanship, initiative, and highest references essential. Sen full particulars, salary required, and enclose photo, t "Chemist-Optician," 110/28, Office of this Paper.

FOWLER, 56 London Road, Southampton, requires Assistan immediately. Send full particulars and if possible photograph, to be returned.

JOHN BELL & CROYDEN, LTD., have an opening for qualified Assistant. Apply, by letter only, to General Manager, 50 Wigmoro Street, London, W.1.

JUNIOR Assistant; quick and accurate Dispenser, good a Counter and Window-dressing; if with Photo, knowledg preferred; nice situation for willing man; references to lat assistant givon; interview. Wood, 162 Marston Road, Stafford

JUNIOR, male, wanted, for Cash Retail, N.H.I. and Photographic Business; S.W. district; near Hammersmith; stalnsual particulars and salary required. 109/32, Office of the Paper.

JUNIOR required immediately, accustomed to N.H.I. Dispensing and Counter work. Apply, either personally or in writing, with references, to J. J. Clemishaw, Ltd., 10 Water Street, Bury. Lancs.

UNIOR qualified Assistant (gentleman) for good-class Dispensing Business; three kept; outdoors; must have had good experience. Apply, stating age and full particulars, including salary required, to Sharmae, Northwood. Applications not answered in three days respectfully declined.

LADY Assistant for Central London; outdoors; must have had Retail experience, including Photographic Goods (not developing and printing); capable of giving occasional assistance at Dispensing Counter; willing to be generally useful. Writc, with full particulars of experience, salary required, etc., to 112/15, Office of this Paper.

LADY, qualified, wanted, to take charge of Drug and Dispensing Department in Stores near London; excellent opportunity for young lady with energy, tact and the right experience, to secure permanent progressive situation. 110/2, Office of this Paper.

LADY Dispensers required for Finchley, Kingston and Forest Gate districts; Hall Certificate; must have had shop experience. Apply by letter, giving full details of training, experience, age, and salary required, to 27/857, Office of this Paper.

L OCUM required for five weeks from July 30; entire charge; General Retail, Photography and N.H.I.; dispenser kept. State terms and experience, references, qualification, etc., to Vincent Shaw, 92 Packington Street, Islington, N.1.

LOCUM.—Qualified lady living in or near London required to take charge first week in July; good Retail experience essential; lady Assistant kept. Salary required and particulars of experience to Miss Spencer, Chemist, Easton Street, High

MANAGER (qualified) required early in July for a good-class Dispensing and Photographic Business; also a qualified Assistant (gentleman) for relicf. Apply, with full particulars, in first letter, to Holman, Ham & Co., Ltd., St. Anne's Pharmacy,

MANAGER required for good-class business in North London district; must be thoroughly reliable and experienced; about 30; a good Window-dresser with Photographic knowledge; tactful and obliging with customers; living accommodation available for suitable man. Apply by letter, giving full particulars, to 27/855, Office of this Paper.

QUALIFIED Manager for branch, single, about 30-35; outdoors; active; must be a good Salesman, good-class Dispensing, Photographic, and Toilet. State salary required (commission given), fullest particulars in first letter, photo if possible. W. Wride, 1 and 2 Strand, East Street, Southampton.

QUALIFIED Lady wanted, from July 2 to 28 inclusive.—Full particulars to A. Gillis, 129 High Street East, Sunderland.

QUALIFIED Assistant required for Aldershot, either sex, for two weeks only, August 1-15 inclusive; easy hours. Apply Box 7540, C. Vernon & Sons, Ltd., 38 Holborn Viaduct, E.C.1.

QUALIFIED Manager required for Light Retail and Dispensing business situate in the West Riding of Yorkshire. State age, experience, and salary required. 110/25, Office of this Paper.

QUALIFIED Assistant (male); good-class Dispensing experience, essential. State age, experience, and salary (out-doors); photo if possible. Gould, 1 Broad Street, Teddington.

QUALIFIED Chemist as Assistant Manager in country business; abstainer, and undeniable references; state full details of experience, age, salary; no house. 27/859, Office of this Paper.

SMART gentlemanly qualified Assistant wanted; must be energetic and good Salesman and have Photographic experience; easy hours and weekly half day. State age and send photograph with full particulars in first letter. Lansdale & Co., Chemists, Queen Square, High Wycombe.

TEMPORARY - Junior Assistant, gentleman, about 22. early in July for about 12 weeks (outdoors). Neale, 122 Seaside Road, Eastbourne.

UNQUALIFIED Assistant required for the season; must have thoroughly practical knowledge of Photography; accurate Dispenser. Please state full particulars as to age, experience, and salary required in first letter. Frederick Liner, Chemist, 156 King Street, Great Yarmouth.

UNQUALIFIED Assistant; state age, experience, salary required; references, and when at liberty; one used to Agricultural and Dispensing business preferred. Allison, Chemist, Cockermouth.

UNQUALIFIED Assistant; must be a first-class Counterman and Dispenser and possess a knowledge of Photography; Midands, not far from Birmingham. State fullest particulars in first letter. 110/250, Office of this Paper.

Wanted, an Assistant for a good-class country business; reliable and trustworthy. Send references and salary required (outdoor). Oldham, Chemist, Wisbech.

WANTED, immediately, qualified Assistant for branch; com-fortable situation. State salary required and full par-ticulars to W. J. Gardam, The Pharmacy, 49a Pecker's Hill Road, Sutton, St. Helens.

WANTED, for London, N.W. district, Assistant, qualified preferred, good Dispenser, with thorough knowledge of the business. Apply, giving full particulars as to salary required, etc., to "Spes," 110/20, Office of this Paper.

YOUNG Ladies required, with good experience in Retail Pharmacy, for clerical work in London; interview would be necessary. Reply, 109/25, Office of this Paper.

£4 WEEKLY.—Male Assistant for first-class Dispensing and Photographic business, Midlands; good appearance and education; age 25 to 35. Particulars of experience and references to 112/27, Office of this Paper.

WHOLESALE,

A LARGE, well-known and long-established firm of Wholcsale A Chemists and Druggists require an energetic and experienced Traveller (qualified) to represent them in the counties of Leicester, Notts. and Lincoln. Give full particulars of training, age, salary required, etc. 27/854, Office of this Paper.

CHEMIST Manufacturer wanted; one used to Pedicure Requisites and the making of same; good wages to com-petent man. Apply 104/30, Office of this Paper.

FIRM of Manufacturing Chemists, also specialising in 1d. and 2d. packet lines, for the wholesale trade, require energetic Travellers with sound connections throughout the country.—Address, stating age, experience, ground covered, and salary required, to 27/853, Office of this Paper.

POREWOMAN, with experience in packing and finishing Chemists' Counter Specialities. Apply, stating age, experience, and wage required, Southall Bros. & Barclay, Ltd.,

POREWOMAN Packer wanted, in London, E.; give particulars of experience and state salary required. 109/130, Office of this Paper.

PASTE Lozenge Maker required, preferably one with experience of Cachou manufacture. 27/852, Office of this Paper.

PILL and Tahlet Maker, for London; state age, experience, and salary required. 109/13, Office of this Paper.

PROPRIETARY Firm desires Representative calling on Chemists throughout Lancashire, carrying one or two other lines. State whether the above territory is worked by car; also mention all commissions at present held. 110/29, Office of this

REPRESENTATIVE.

REPRESENTATIVE.

A BOURJOIS & CIE., LTD., require a really high-class Representative for Lancashire, to take over present connection on the ground for their well-known "Juva Powder" and "Ashes of Roses" series. National Advertising Campaign is in course of preparation. The position is one of scope and a permanent one. Good salary, expenses and commission. Only gentlemen of real ability and able to hold a responsible position entertained. Applications must be by letter only, and should give details of past and present position.

Sales Manager,

A. BOURJOIS & CIE., LTD.,
66 CARTER LANE, LONDON, E.C.

REPRESENTATIVES required by Manufacturers of high-class REPRESENTATIVES required by Manufacturers of Ingli-class Tollet Preparations, showing very good profit to retailers; must have good connections amongst Ladies' Hairdressers, Chemists and Stores; preference given to those representing another non-competing house; commission basis; all counties open. Applicants must give full particulars of past experience and turnover and state terms required. State in confidence territory covered and lines carried. 110/4, Office of this Paper.

CTOCKTAKING.—Temporary men required for extensions and casting of priced Drug Stock Books; must know names of Drugs and Chemicals, be accurate at figures, and have had previous experience of such work. Apply, with details of drug trade experience, to "F. L. D.," 27/862, Office of this Paper.

WANTED, a thoroughly practical man used to the manufacture of oval gelatine coated Pills, particularly Quinine, Apply 27/858, Office of this Paper.

TRAVELLER wanted for Midlands, with good connection among Chemists, to carry Soap, Oils, Powders, Perfumes, etc., on commission basis. Write, 109/35, Office of this Paper.

TRAVELLER wanted, with good connection in South London, to approach Chemists for a real live Developing and Printing Company; commission basis. T.N.M. Photo Co., 91 Lupus Street, S.W.1.

[COLONIAL, INDIAN AND FOREIGN.]

KOBE, JAPAN.—Qualified Assistant required for European business, age about 25; must be total abstainer; experience in General Pharmacy necessary; 4 years' agreement; salary commencing 150 yen per month, with board and lodging; second-class passage paid out and home. Apply, with copies of testimonials and photograph, to 27/860, Office of this Paper.

MALAY STATES.—Junior Assistant required for Malay States; salary \$300 (£35) per mensen for first year, \$325 (£37 188, 4d.) p.m. for second year, \$350 (£40 168, 8d.) p.m. for third year, with second-class passage out and home on agreement expiring; excellent prospects for right man; living costs in club chambers, \$145 (£16 188, 4d.) p.m., board and lodging (food good); leave England end of July. Apply by letter only to Dakin Bros., 82 Middlesex Street, London, E.1, with copy reference.

SITUATIONS WANTED.

RETAIL

[HOME.]

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

A DVERTISER (male), 44, desires any position; experience with Chemists, Doctors, R.A.M.C.; highest references; disengaged. 65 Cloudesley Road, Islington.

A N experienced lady Dispenser (Hall) booking dates for Locums; engaged last fortnight July; other dates free; long roferences Doctors, Hospitals, Chemists; incderate salary. "S.," 45 Nimrod Road, Streatham.

Assistant, unqualified, middle aged, married; exceptional experience, London and provinces; expert knowledge Photography and management of D. & P. Works. "E. U.," 34 Talbot Terrace, Lewes

A S Locum or permanency; highest references and experience; disengaged shortly. "Chemist," 176 Lewisham High Road, S.E.4.

A SSISTANT, male, 34, good experience, seeks berth (London); 2½ years present post; disengaged middle July. "B.," 24 Mead Plar, Neasden, N.W.10.

A SSISTANT (unqualified), well experienced, desires permanent situation, Senior post; energetic, trustworthy, capable of responsibility; could manage Drug Store or Pharmacy (with cover). "Reliable," 32 Coin Street, London, S.E.

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Lane, Stretford.

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L OCUM; qualified; competent, experienced and trustwort abstainer; good appearance and address; highest reference open dates after September 9. For terms, A. J. Paynter Hampstead Road, Bristol.

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LOCUM, unqualified, desires fortnight's engagement, start July 2; seaside resort. Reply "Associate," 14 Hawki Road, Hillsboro', Sheffield.

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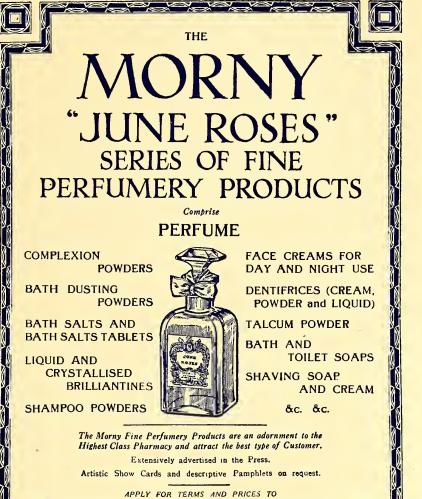
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